HP OpenView AssetCenter

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Cable and Circuit

invent

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Introduction

! Warning:

The Cable and Circuit module relies on the technical knowledge of the following domains:

- Organization of cabling systems
- Cabling techniques
- Cabling material
- Cabling standards

This guide does not explain the technical knowledge related to the domains mentioned above; it is assumed that you are already familiar with it.

Who is the Cable and Circuit module intended for?

The Cable and Circuit module is mainly intended for organizations with a complex networking system (LAN, WAN, telephony, video, etc).

In general, it is used by the following people:

- Network administrators
- Maintenance technicians

What does the Cable and Circuit module do?

The Cable and Circuit module enables you to perform the following tasks:

- Conduct a physical and detailed inventory of your cables and cable devices:
 - Technical description
 - Geographic location
- Locate your cables and cable devices:
 - Labeling system
 - Description of links between cable devices and cables.
 - Verify the continuity of the cables' paths (from the user to the server or to the PABX).
 - Create projects and work orders to mange the placement or removal of cables and cable devices.

Managing these tasks enables you to:

- Locate each cable and cable device.
- Easily intervene in case of a problem at level of the faulty cable or cable device.
- Create, modify or cancel connections.
- Homogenize the mode of connection between cables and cable devices.
- Define cabling standards all the way to the conductors and connector pins.

How to use this guide

Chapter Overview

This chapter outlines some important principals relating to the cabling of a network and explains how AssetCenter represents a cable network. You should read this information to form a general idea of how AssetCenter functions.

Chapter Presentation of the practical case

To make this guide as simple as possible, we have developed an example that is used throughout its entirety. This example represents a part of a network in the AssetCenter database. Using this example, you will be guided through the various tables involved in the Cable and Circuit module and will use most of the cabling wizards that automate the most common tasks.

Read the chapter Presentation of the practical case [page 21] to better understand what you are going to create in the AssetCenter database using the practical case, and how to best use this practical case throughout the course of this guide.

Chapter Implementing cable management (Cable and Circuit)

Before creating cable devices, cables and cable links, it is indispensable that you perform some preliminary tasks and populate certain tables of reference. Read this chapter to understand what these tasks are, what purpose these tables of reference serve and how to populate them.

The steps outlined in this chapter are done so in an ordered fashion. You must respect this order in order to properly perform these steps.

Each step brings you information on the following points:

ጆ Note:

The following points are only detailed if necessary.

- General information:
 - Definitions

This section indicates which definitions you should consult in the chapter Glossary (Cable and Circuit) [page 173]. It is important to read these definitions since each one of these glossary terms has a precise signification in AssetCenter.

Table names

Names of the reference tables to populate.

Access menu

Menu enabling you to access the tables to populate.

• Simplified data model

This model is for the administrator who wants to understand how the database is structured. This information is indispensable for creating data in an appropriate manner and for customizing the use of AssetCenter for your personal needs.

Process of creating records

This point provides you the information you need to create records in the table.

Prerequisites

In order to populate certain tables, you need to have previously populated certain others. The list of such tables is provided for you in this point.

• Fields and links that must absolutely be populated

There are numerous fields and links in the AssetCenter database. Certain are mandatory, others are optional. This point provides you the list of

fields and links that are mandatory in order for the Cable and Circuit module to function correctly.

• Creation of records for the practical case

Nothing speaks louder than an example! That's why we have illustrated each step necessary to implement the Cable and Circuit module with a concrete example. All you need to do is adapt this example to your own needs.

In order to keep the amount of extra information to a minimum, the detailed descriptions of fields and links present in the database is not provided in this guide. You can obtain this information by using the contextual help available for these fields (Help on this field).

In the same way, we will not detail each step taken to create records in all the different tables. This is because the steps taken are always the same and always respect the general interface of AssetCenter application.

Chapter Termination fields

Once the tables of reference are created, you can concentrate on creating the termination fields. Termination fields must be created before running the riser and lateral cables in order to take advantage of the cabling wizards, which help you accomplish these tasks.

Read this chapter to understand how to create, expand and duplicate termination fields.

ጆ Note:

To create termination fields, you use cabling wizards and rely on the termination-field configurations.

Chapter Cable devices, cables and connections - manual creation

Of course, you can also create cable devices, cables and connections manually. This chapter explains how to do this.

However, AssetCenter is also provided with cabling wizards that automate these common tasks.

Read this chapter if you wish to learn how these wizards create such records. Otherwise, you can skip this chapter.

Chapter Connections - creation with the wizards

This chapter presents the cabling wizards that automate the main tasks required to manage your cables.

Each wizard is presented with the following information:

- Functions performed by the wizard
- Prerequisites
- Launching the wizard
- Information used when using the wizard
- Data created or modified by the wizard
- Viewing the result
- After having launched the wizard
- Resolving possible problems

Read this chapter to learn about the possibilities offered by these wizards as well as how they function.

Chapter Viewing the traces

A cable network is composed of numerous cables and connections. In order to help you locate them all, AssetCenter represents the traces of your network.

Read this chapter to understand how to access the representation of these traces, how to read them and how to browse through them.

Chapter Glossary (Cable and Circuit)

The terminology for the Cable and Circuit module is very specialized. The glossary that we propose contains the key terms used in the AssetCenter application and a selection of terms common to this profession.

Read this glossary to better understand what these terms signify.

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1 Overview

Managing a cable network is extremely complex: There is a large number of cables and cable devices involved in a network. You need to be able to locate these cables and cable devices with precision and simplicity.

AssetCenter offers this possibility and enables you to manage large quantities of information that would otherwise be difficult to store on paper or in an generic database.

Areas covered by the Cable and Circuit module

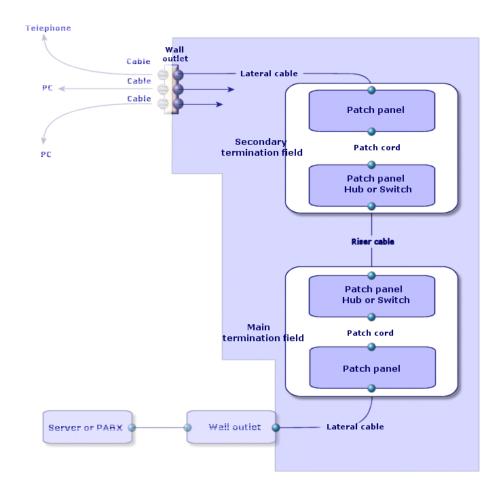
This section covers certain aspects of managing a cable network and explains how the network is represented in AssetCenter. Some principal terms are also defined in this section.

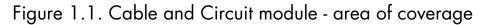
The Cable and Circuit module concerns the "hidden" part of the cable network, from the wall outlet to the termination fields.

Examples:

- The invisible side of the wall outlet is also taken into consideration. The visible side of the outlet and its connection to computers, peripheral devices and telephones is not taken into consideration here.
- The termination-field devices, the riser and the lateral cables are also included here. The servers, the PABX and the connection to them are not concerned by the module.

The following illustration shows you the part of a network covered by the Cable and Circuit module.





Principal concepts

This section explains the key terms used in the Cable module. For definitons of these terms: ► Glossary (Cable and Circuit) [page 173]

Cables: pairs, conductors, bundles

- ▶ Pair/conductor [page 182]
- Bundle [page 180]

Cable devices: pins, terminals, ports

- Pin/ Terminal [page 173]
- Port [page 183]

The connection between cable devices and cables: connection types

Connection type [page 186]

The cable devices and cables are connected in the following ways:

- From device pin to device pin.
- From device pin to cable conductor or wire.
- From device port to device port.
- From device port to cable bundle.

Thus, AssetCenter distinguishes between two types of connections:

- By pin: Each pin is identified.
- By port: Pins are not longer identified individually.

Connections: cable links, user and host directions

- Cable link [page 182]
- ▶ Host [page 181]
- ▶ User [page 188]

💋 Note:

The patch cords used to cross connect the termination-field devices are not described in the database. Only the cable links between the ports and these devices are described.

Locating wires and pins: color codes

▶ Color code [page 174]

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2 Presentation of the practical case

In order to facilitate your learning experience, we will develop a practical case throughout the course of this guide.

This will help you better understand what the Cable and Circuit module represents and how it represents it.

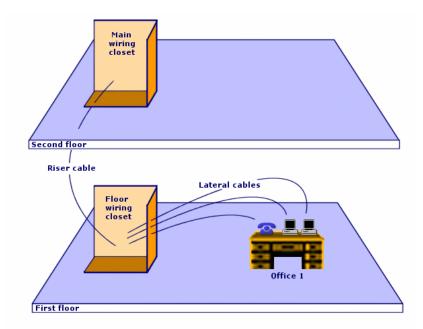
🐓 Warning:

For an example to work, you must perform each step in its entirety and respect the order in which these steps are presented. Only the fields and links that are absolutely necessary to perform most procedures are referred to in this guide. Feel free to explore the utility of the other fields and links on your own.

Locations of the practical case

The network that we are going to represent is divided up in the locations illustrated by the following diagram:

Figure 2.1. Practical case - locations to use



Network of the practical case

The following diagram illustrates which portion of the network we will use in the AssetCenter database for our practical case.

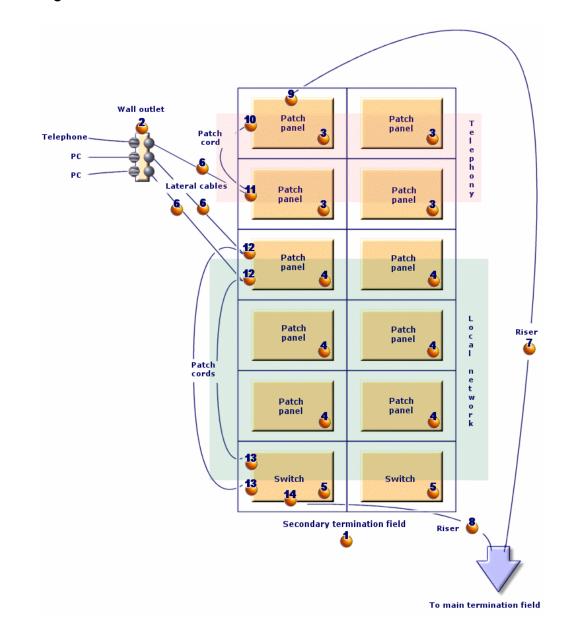


Figure 2.2. Practical case - network to use

This network contains components that will not be used in the example illustrating the Cable and Circuit module:

• 1 telephone connected to the wall outlet by 1 telephone cable.

- 1 stationary computer connected to the wall outlet by 1 LAN cable.
- 1 portable computer connected to the wall outlet by 1 LAN cable.

Then there are the components that will be used:

Location on the diagram	Quantity	Component	Composition	Connection type
4	1	Termination field	2 columns and 6 rows	Does not apply.
2	1	Wall outlet	3 ports with 8 pins	By pin
<mark>3</mark>	4	Patch panels	Back side: 24 ports with 8 preloaded pins	By port
			Front side: 24 RJ45 ports	By port (patch)
4	6	Patch panels	Back side: 256 pins (32 x 8)	By pin
			Back side: 24 RJ45 ports	By port (patch)
5	2	Switch	10 slots	Does not apply.
•	1	Module (for one of the switch slots)	8 RJ45 ports	By port
é	3	Lateral cables	4 twisted pairs with 2 copper wires	Does not apply.
4	1	Riser cable	32 twisted pairs with 2 copper wires	Does not apply.
<mark>8</mark>	1	Riser cable	4 twisted pairs with 2 copper wires	Does not apply.
e	1	Port	2 pins (back side)	By pin
10	1	Port	8 pins (front side)	By port
1	1	Port	8 pins (front side) 8 pins (back side)	By port By pin
12	2	Ports	8 pins (2 sides)	By port
13	2	Ports	8 pins (front side)	By port
14	1	Port	8 pins (back side)	By port

Table 2.1. Practical case - list of components to use

3 Implementing cable management (Cable and Circuit)

Before implementing the Cable and Circuit module, you need to perform certain preliminary steps, which are described in this chapter.

You must then define the reference information that will be used to create and define your cables, cable devices and cable links. This reference information must be created first: You can create it all right away, or do so as you go.

Preliminary steps

To continue reading this guide

Before continuing to read this guide, you must first:

- 1 Install AssetCenter.
- 2 Execute AssetCenter.
- 3 Connect to AssetCenter's demonstration database.
- 4 Activate the Cable and Circuit module using the **File/ Activate modules** menu item.

Working with your own database using the Cable and Circuit module

In order to work with your own database, you must:

- 1 Install AssetCenter.
- 2 Execute AssetCenter Database Administrator.

- 3 Create your database by importing the Cable and Circuit *line-of-business data* (Procedure detailed below).
- 4 Insert your user's license that includes authorization for the Cable and Circuit module.
- 5 Execute AssetCenter.
- 6 Connect to your database.
- 7 Activate the Cable and Circuit module using the **File/ Activate modules** menu item.

Importing the Line-of-business data when you create the database

Proceed in the following manner:

- 1 Execute AssetCenter Database Administrator.
- 2 Select the File/ Open menu item.
- ³ Select the **Open database description file create new database** option.
- 4 Select the gbbase.xml file, located in the config sub-folder of the AssetCenter installation folder.
- 5 Start the database creation wizard (Action/ Create database menu).
- 6 Follow the instructions in the Administration guide, chapter Creating, modifying and deleting an AssetCenter database.

In the page Data to import, select Cable and Circuit - Line-of-business data.

Importing the *Line-of-business* into an existing database

Proceed in the following manner:

- 1 Execute AssetCenter Database Administrator.
- 2 Select the File/ Open menu item.
- ³ Select the **Open database description file create new database** option.
- 4 Select the gbbase.xml file, located in the config sub-folder of the AssetCenter installation folder.
- 5 Start the database creation wizard (Action/ Create database menu).
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Generate SQL script / Create database page:

Fields	Value
Database	Select the connection to the database into which
	you wish to import the reports.

Fields	Value
Creation	Import line-of-business data.
Use avanced creation options	Do not select this option

Creation parameters page:

Fields	Value
Password	Enter the administrator's password.
	Note:
	The AssetCenter database adminstrator
	is the record in the Departments and
	employees (amEmplDept) table for
	which the Name (Name) field is set to
	Admin.
	The database connection login in stored
	in the User name (UserLogin) field.
	The administration name is Admin.
	The password is stored in the Pass-
	word field (LoginPassword).

Data to import page:

Fields	Value
Available data	Select the option Cable and Circuit - Line-of-
	business data.
Stop import if error	Select this option for the import to stop if a problem is encountered.
Log file	Full name of the file to which all import opera- tions, including errors and warnings, are logged.

7 Execute the options defined using the wizard (**Finish** button).

To learn more about installing AssetCenter

Refer to the Installation and upgrade guide.

Cable-device types

Definitions

▶ Cable device type [page 187]

Table names

The types of cable devices are stored in the **amDeviceType** itemized list in the **Itemized lists** table (**amItemizedList**).

Access menu

Administration/ Itemized lists

Creating cable device types

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amDeviceType** itemized list.
- 3 Create the values that you need.

Prerequisites

No prerequisites.

The **amDeviceType** itemized list already exists in the **Itemized lists** table.

Creating the cable device types for the practical case

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amDeviceType** itemized list.
- 3 Create the following values if they don't already exist:
 - Switch module
 - Patch panel
 - Wall outlet
 - Switch

Cable types

Definitions

▶ Cable type [page 185]

Table names

The types of cables are stored in the **amCableType** itemized list in the **Itemized lists** table (**amItemizedList**).

Access menu

Administration/ Itemized lists

Creating cable types

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amCableType** itemized list.
- 3 Create the values that you need.

Prerequisites

No prerequisites.

The **amCableType** itemized list already exists in the **Itemized lists** table.

Creating the cable types for the practical case

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amCableType** itemized list.
- 3 Create the following values if they don't already exist:
 - Twisted pairs

Cable roles

Definitions

▶ Role [page 184]

Table names

The cable roles are stored in the **amCableRole** itemized list in the **Itemized lists** table (**amItemizedList**).

Access menu

Administration/ Itemized lists

Creating cable roles

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amCableRole** itemized list.
- 3 Create the values that you need.

Prerequisites

No prerequisites.

The **amCableRole** itemized list already exists in the **Itemized lists** table.

Creating the cable roles for the practical case

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amCableRole** itemized list.
- 3 Create the following values if they don't already exist:
 - Riser
 - Lateral

Colors to use for the color codes

Table names

The colors are stored in the **Itemized lists** table (**amItemizedList**):

- amColor
- amTipColor
- amRingColor

Access menu

Administration/ Itemized lists

The amColor, amTipColor and amRingColor itemized lists already exist in the Itemized lists table.

Creating colors

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amColor** itemized list.
- 3 Create the values that you need.
- 4 Select the **amTipColor** itemized list.
- 5 Create the values that you need.
- 6 Select the **amRingColor** itemized list.
- 7 Create the values that you need.

💡 Tip:

You can begin by creating the colors in the **amColor** itemized list, then copy them into the **amTipColor** and **amRingColor** itemized lists.

Prerequisites

No prerequisites.

Creating the colors for the practical case

We are going to create the colors that we need for the color code entries for our practical case.

First, we will create them in the **amColor** itemized list, and then we will copy them into the **amTipColor** and **amRingColor** itemized lists.

Creating the colors in the amColor itemized list

- 1 Display the list of itemized lists (Administration/ Itemized lists).
- 2 Select the **amColor** itemized list.
- 3 Add the following values to the itemized list:
 - white/blue
 - white/brown
 - white/orange
 - white/green
 - blue
 - blue/white

- blue/yellow
- blue/black
- blue/red
- blue/violet
- yellow/blue
- yellow/brown
- yellow/green
- brown
- brown/white
- brown/yellow
- brown/black
- brown/red
- brown/violet
- black/blue
- black/brown
- black/orange
- black/green
- orange
- orange/black
- red/blue
- red/brown
- red/green
- green
- green/white
- green/yellow
- green/black
- green/red
- green/violet
- violet/blue
- violet/brown
- violet/green

Creating the colors in the amTipColor and amRingColor itemized lists

Follow the same steps you used for the **amColor** itemized list (by creating the same colors).

Color codes

Definition

- ▶ Color code [page 174]
- ▶ Color code entry [page 179]
- ▶ Ring [page 182]
- ▶ Tip [page 183]

Table names

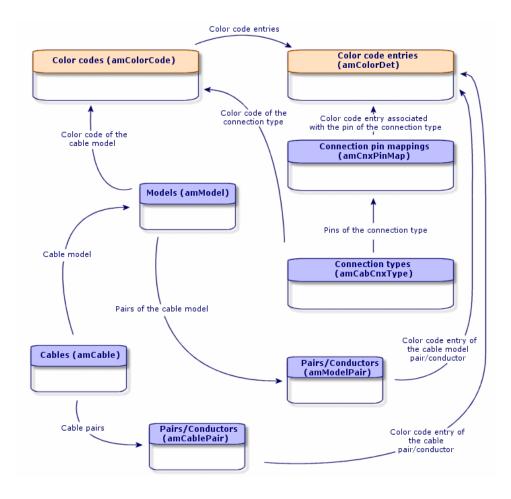
- Color codes (amColorCode)
- Color code entries (amColorDet)

Access menu

Cable/ Color codes

Simplified data model

Figure 3.1. Color codes - data model



Creating color codes

- $1 \quad \text{Display the list of color codes (Cable/ Color codes).}$
- 2 For each color code to create:
 - 1 Create a record in the **Color codes** table.
 - 2 Add a color code entry by pair or by conductor.

Prerequisites

We recommend that you first create the colors in the following itemized lists of the **Itemized lists** table (**amItemizedList**):

- amColor
- amTipColor
- amRingColor

If you have not already done this, you can add the colors on the fly while you create the color codes.

Fields and links that must absolutely be populated

Table 3.1. Color codes - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	
Color codes table (amColorCode)		
Name	Name	
Color code entries	ColorDetail	
Color code entries table (amColorDet)		
#	sSequenceNumber	
Color	Color	

Creating the color codes for the practical case

We are going to create 2 color codes and their entries.

Creating the color codes

- 1 Display the list of color codes (Cable/ Color codes).
- 2 Create a new record for each color code in the **Color codes** table (**amColorCode**) and populate the following fields:

Value of the field or link	Record 1	Record 2
Name (Name)	568B - 4 pairs	32 pairs

Creating the entries of color code 568B - 4 pairs

- 1 Select the color code **568B 4 pairs**.
- 2 Create the following color codes:

Value of the # field (sSequen- ceNumber)	Value of the Color field (Color)	Value of the Tip color field (TipColor)	Value of the Ring color field (RingColor)
1	blue	white/blue	blue
2	orange	white/orange	orange
3	green	white/green	green
4	brown	white/brown	brown

Creating the entries of color code 568B - 32 pairs

- 1 Select the color code **568B 32 pairs**.
- 2 Select the color code and create the following color code entries:

Value of the # field (sSequen- ceNumber)	Value of the Color field (Color)	Value of the Tip color field (TipColor)	field (RingColor)
1	white/blue	white/blue	blue/white
2	white/brown	white/brown	brown/white
3	white/green	white/green	green/white
4	blue/yellow	blue/yellow	yellow/blue
5	blue/black	blue/black	black/blue
6	blue/red	blue/red	red/black
7	blue/violet	blue/violet	violet/blue
8	yellow/brown	yellow/brown	brown/yellow
9	yellow/green	yellow/green	green/yellow
10	brown/black	brown/black	black/brown
11	brown/red	brown/red	red/brown
12	brown/violet	brown/violet	violet/brown
13	black/orange	black/orange	orange/black
14	black/green	black/green	green/black
15	red/green	red/green	green/red
16	green/violet	green/violet	violet/green
17	white/blue	white/blue	blue/white
18	white/brown	white/brown	brown/white
19	white/green	white/green	green/white
20	blue/yellow	blue/yellow	yellow/blue
21	blue/black	blue/black	black/blue
22	blue/red	blue/red	red/black
23	blue/violet	blue/violet	violet/blue
24	yellow/brown	yellow/brown	brown/yellow
25	yellow/green	yellow/green	green/yellow
26	brown/black	brown/black	black/brown
27	brown/red	brown/red	red/brown
28	brown/violet	brown/violet	violet/brown
29	black/orange	black/orange	orange/black
30	black/green	black/green	green/black

Value of the # field (sSequen- ceNumber)	Value of the Color field (Color)	Value of the Tip color field (TipColor)	Value of the Ring color field (RingColor)
31	red/green	red/green	green/red
32	green/violet	green/violet	violet/green

Label rules

Definitions

- ▶ Label rule [page 183]
- Label [page 179]

Table names

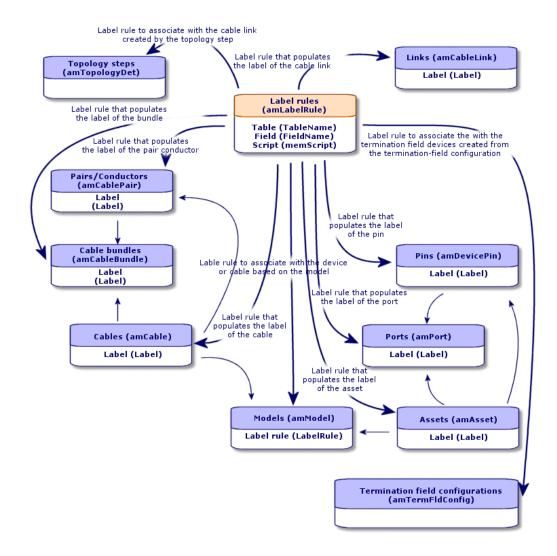
Label rules (amLabelRule)

Access menu

Cable/ Label rules

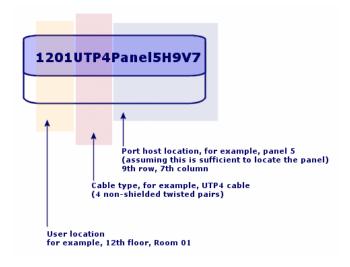
Simplified data model

Figure 3.2. Labels and label rules - data model



Label example

Figure 3.3. Cable label - example



Creating label rules

🐓 Warning:

In order for the wizards to function, you must create label rules to identify the following components:

- Cable devices
- Termination-field devices
- Cables
- Links

😯 Tip:

There are several ways to create cable-link labels according to, for example:

- The connection can be made by port or by pin.
- You can use either the starting and ending numbers in a sequence of pins or you can use all the numbers in the sequence.
- The link can reference a cable or a cable device.

You can create label rules for the following components:

- Bundles
- Pins/ terminals
- Ports
- Pairs/conductors

To create label rules:

- $1 \quad \text{Display the list of label rules (Cable/ Label rules).}$
- 2 Create the records from the list.

Prerequisites

Determine with precision which information you want to use to create labels.

Fields and links that must absolutely be populated

Table 3.2. Label rules - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Field	FieldName
Name	Name
SQL name	SQLName
Script	memScript
Table	TableName

Creating the label rules for the practical case

We are going to create the lable rules we need to use in the practical case in order to:

- Recognize the cables according to their model and their code.
- Name the links.
- Populate the lables and cable devices.

To do this:

- 1 Display the list of label rules (**Cable/ Label rules**).
- 2 Create a new record for each lable rule in the **Label rules** table (**amLabelRule**) and populate the following fields:

Field	Record 1	Record 2	Record 3	Record 4	Record 5
Name	Practical case - Cables	Practical case - Link - Sequen- tially, by pairs	Practical case - Wallfield assets	Practical case - Wall outlet link	Practical case - Port of a termin- ation-field patch panel link

Field	Record 1	Record 2	Record 3	Record 4	Record 5
Table	Cables (amC-	Links (amC-	Assets (amAs-	Links (amC-	Links (amC-
	able)	ableLink)	set)	ableLink)	ableLink)
Field	Label	Label	Label	Label	Label
Script	See below.	See below.	See below.	See below.	See below.

😯 Tip:

To avoid typing the following scripts by hand, you can copy and paste them from the online help to AssetCenter.

The values of the **Script** field are:

• Record 1:

RetVal = [Model.Name] + " - " + [Code]

Record 2:

```
Dim lErr
              As Long
Dim hqPair As Long
Dim strResult As String
Dim strVal As String
hqPair = AmQueryCreate()
lErr = AmQueryExec(hqPair, "SELECT Name FROM amCablePair WHERE lBundleI
d = " & [lBundleId] & " ORDER BY sSequenceNumber")
Do While ( lErr = 0 )
strVal = AmGetFieldStrValue(hqPair, 0)
If ( strResult = "" ) Then
strResult = strVal
Else
strResult = strResult & " " & strVal
End If
lErr = AmQueryNext(hqPair)
Loop
AmReleaseHandle(hqPair)
RetVal = [Cable.Model.Name] & " (" & [Cable.Label] & ") - (" & strResul
t & ")"
```

Record 3:

```
Dim lErr As Long
Dim hqTFDev As Long
Dim strTFName As String
Dim lCol As Long
Dim lRow As Long
hqTFDev = AmQueryCreate()
```

```
lErr = AmQueryExec(hqTFDev, "SELECT DeviceTermFieldDev.TerminationField
.Name, DeviceTermFieldDev.sHoriz, DeviceTermFieldDev.sVert FROM amAsset
WHERE lAstId = " & [lAstId])
If ( lErr = 0 ) Then
strTFName = AmGetFieldStrValue(hqTFDev, 0)
lCol = AmGetFieldLongValue(hqTFDev, 1)
lRow = AmGetFieldLongValue(hqTFDev, 2)
End If
AmReleaseHandle(hqTFDev)
RetVal = FormatResString("$1 Co: $2 Li: $3", strTFName, lCol, lRow)
```

Record 4:

```
RetVal = FormatResString("$1:$2", [Device.Label], [Port.PortNo])
```

Record 5:

```
RetVal = FormatResString("$1 Port: $2", [Device.Label], [Port.PortNo])
```

When you select the label rule *Practical case - Cables* for a cable, the label will indicate:

- The cable's model.
- The cable's code.

It is presented in the form of:

<Name of the cable model> - <Code of the cable>

Example:

FTP - Category 5 - 4 twisted pairs - 000001

Types of pairs and conductors

Definitions

Pair/Conductor type [page 187]

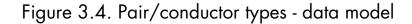
Table names

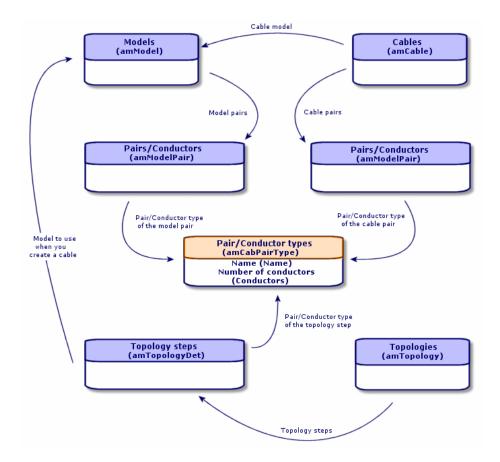
Pair/conductor types (amCabPairType)

Access menu

Cable/ Cable pair/conductor types

Simplified data model





Creating pair/conductor types

- 1 Display the list of pair/conductor types (**Cable / Cable pair/conductor types**).
- 2 Create as many records as there are pair/conductor types that you use.

Prerequisites

None

Fields and links that must absolutely be populated

Table 3.3. Pair/conductor types - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name
No. of conductors	sConductors

Creating the pair/conductor types for the practical case

We are going to create a pair type composed of 2 copper wires:

- 1 Display the list of pair/conductor types (Cable/ Cable pair/conductor types).
- 2 Create a new record in the **Pair/Conductor types** table (**amCabPairType**) and populate the following fields:

Field or link to populate	Value
Name (Name)	Copper
No. of conductors (sConductors)	2

Connection types

Definitions

▶ Connection type [page 186]

Table names

Connection types (amCabCnxType) Connection pin mappings (amCnxPinMap)

Access menu

Cable/ Cable connection types

Creating connection types

- 1 Identify the connection types that you use in your network.
- 2 Display the list of connection types (**Cable/ Cable connection types**).

- 3 Create a record by identified connection type.
- 4 If you want to associate each of this connection-type's pins to a color code entry, then you have to populate the **Connection pin mappings** link. Create as many links as the connection type contains pins/terminals.

Prerequisites

You need to have already created the color codes.

Fields and links that must absolutely be populated

Table 3.4. Connection types - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field	Remarks
	or link	
Cable connection ty	pes table (amCabCnx	Туре
Name	Name	
Port-based or pin-	seMode	
based		
No. of pins/terminals	sPinCount	
Color code	ColorCode	
Connection pin map- pings	CnxPinMaps	 If the Port-based or pin-based field has Pin for its value, then this link must be populated. If the Port-based or pin-based field has Port for its value, then this field is option- al.
Connection pin map	pings table (amCnxl	PinMap)
#	sPinSeq	
Color code entry	ColorCodeDet	

Creating the connection types for the practical case

We are going to create the following connection types:

- **RJ45 568B Port**
- RJ45 568B Pin

Creating the connection types

- 1 Display the list of connection types (**Cable/ Cable connection types**).
- 2 Create a new record in the **Cable connection types** table (**amCabCnxType**) and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (Name)	RJ45 - 568B - Port	RJ45 - 568B - Pin
Port-based or pin-based (Name)	Port	Pin
No. of pins/terminals (sPin-	0	8
Count)		
Color code (ColorCode)		568B - 4 pairs

Populate the Connection pin mappings link for the RJ45 - 568B - Pin connection type.

- 1 Select the **RJ45 568B Pin** connection type.
- 2 Create the connection-pin mapping entries by populating the following fields:

Value of the # field (sPinSeq)	Color code entry (ColorCodeDet)
1	orange
2	orange
3	green
4	blue
5	blue
6	green
7	brown
8	brown

Cable duties

Definitions

▶ Duty [page 180]

Table names

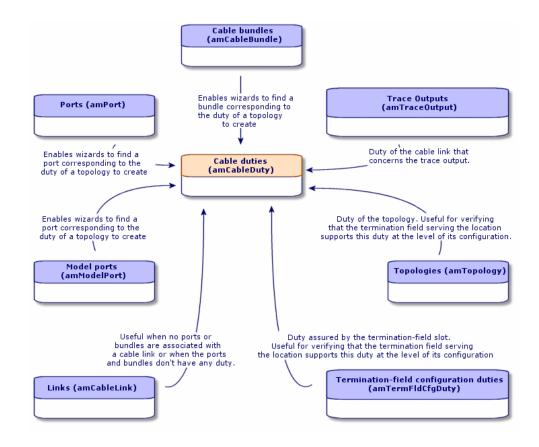
Cable duties (amCableDuty)

Access menu

Cable/ Cable duties

Simplified data model

Figure 3.5. Duties - data model



Creating cable duties manually

- 1 Display the list of cable duties (**Cable / Cable duties**).
- 2 Create a record for each of the duties that your cable network fulfills.

😯 Tip:

At this stage, we advise against populating the **Topologies** link (**Topology**) since the topologies have not yet been created. It is better to associate a duty with the topologies after they have been created.

Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Table 3.5. Cable duties - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name

Creating the cable duties manually for the practical case

We are going to create two duties.

- 1 Display the list of cable duties (**Cable/ Cable duties**).
- 2 Create a new record and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (Name)	Data	Voice

Locations

We are introducing the **Locations** table for the needs of our practical case.

Table names

Locations (amLocation)

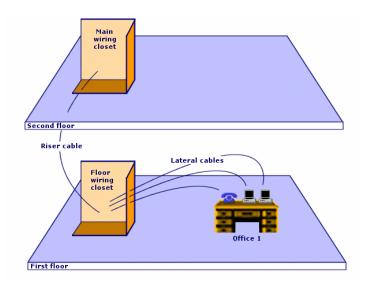
Access menu

Portfolio/ Locations

Creating the locations for the practical case

We are going to create the records that correspond to the locations represented by the following diagram:

Figure 3.6. Practical case - locations to use



- $1 \quad \text{Display the list of locations} (\textbf{Portfolio/ Locations}).$
- 2 Create a new record per location and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2	Value for record 3
Name (Name)	Cabled building	1st floor	2nd floor
Sub-location of (Par- ent)	Do not populate.	Cabled building	Cabled building
Field or link to populate	Value for record 4	Value for record 5	Value for record 6
Name (Name)	Wiring closet for each floor	Main wiring closet	Office 1
Sub-location of (Par- ent)	Cabled building/1st floor	Cabled building/2nd floor	Cabled building/1st floor

Projects and work orders associated with cabling

The projects and work orders enable you to conserve a trace of the operations carried out on the network:

- Running or removing cables.
- Connecting or disconnecting bundles and ports.
- Installing a cable device.

You need to create projects and work orders before launching the cabling wizards. Due to this constraint, you must create at least one project containing at least one work order.

The cabling wizards do not populate the following tables, unless you select a project and a work order at the end of the wizard's execution:

- Trace outputs (amTraceOutput)
- Trace histories (amTraceHistory)
- Trace operations (amTraceOp)

Table names

- Projects (amProject)
- Work orders (amWorkOrder)

Access menu

- Portfolio/ Projects
- Portfolio/ Work orders

Creating projects and work orders associated to the Cable and Circuit module

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Create a project for each cabling operation you will perform.
- 3 Associate one or more work orders with the project.
- 4 Execute the cabling wizards by referencing the appropriate project and work order.

These wizards automatically populate the following links in the projects:

- Assets (AstProjDescs)
- Cables (ProjectCables)
- Project traces (ProjectTraces)

These wizards automatically populate the following links in the work orders:

- Title (Title)
- Work order devices (ProjBien)
- Project cables (ProjCable)
- Project traces (ProjTraceOut)

Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Table 3.6. Projects and work orders associated with cabling - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Projects table (amProject)	
Title	Title
Work orders	WorkOrders
Work orders table (amWorkOrder)	
Work order #	WONo

Creating the projects and work orders for the practical case

We are going to create one project per wizard, which you will execute in the practical case. We will also associate a work order to each one of these projects.

Thus, you will be able to consult these projects and work orders in able to better understand what the wizards create, modify or delete.

Creating the projects

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Create a new record per project and populate the following fields:

	Label (Title)
Value for record 1	Create a termination field
Value for record 2	Disconnect bundles
Value for record 3	Disconnect ports
Value for record 4	Duplicate a wiring closet
Value for record 5	Swap assets
Value for record 6	Remove cables
Value for record 7	Remove lateral cables
Value for record 8	Remove cables by location
Value for record 9	Expand a termination field
Value for record 10	Cross-connect generic hub
Value for record 11	Cross-connect specific hub
Value for record 12	Cross-connect bundles
Value for record 13	Cross-connect ports
Value for record 14	Cross-connect ports (internal)
Value for record 15	Cross-connect wallfield

	Label (Title)
Value for record 16	Run lateral cables
Value for record 17	Run riser cables
Value for record 18	Relocate cables
Value for record 19	Transfer project assets
Value for record 20	Relocate project connections
Value for record 21	Transfer project cables

Creating a Work orders link for each project

- 1 Select each project one by one.
- 2 Select the **Work orders** tab and add a new work order to the project by populating the following fields:

Project label	Value of the # of work orders (WONo)
Create a termination field	Accept the value proposed by AssetCenter.
Disconnect bundles	Accept the value proposed by AssetCenter.
Disconnect ports	Accept the value proposed by AssetCenter.
Duplicate a wiring closet	Accept the value proposed by AssetCenter.
Swap assets	Accept the value proposed by AssetCenter.
Remove cables	Accept the value proposed by AssetCenter.
Remove lateral cables	Accept the value proposed by AssetCenter.
Remove cables by location	Accept the value proposed by AssetCenter.
Expand a termination field	Accept the value proposed by AssetCenter.
Cross-connect generic hub	Accept the value proposed by AssetCenter.
Cross-connect specific hub	Accept the value proposed by AssetCenter.
Cross-connect bundles	Accept the value proposed by AssetCenter.
Cross-connect ports	Accept the value proposed by AssetCenter.
Cross-connect ports (internal)	Accept the value proposed by AssetCenter.
Cross-connect wallfield	Accept the value proposed by AssetCenter.
Run lateral cables	Accept the value proposed by AssetCenter.
Run riser cables	Accept the value proposed by AssetCenter.
Relocate cables	Accept the value proposed by AssetCenter.
Transfer project assets	Accept the value proposed by AssetCenter.
Relocate project connections	Accept the value proposed by AssetCenter.
Transfer project cables	Accept the value proposed by AssetCenter.

Natures for cables and cable devices

The natures define the information that is common to certain groups of assets. The cables and cable devices each require a specific nature that will be associated with the models of cables and cable devices. The information that you define at the nature level determines whether certain fields and links will be displayed in the detail of models, cables and assets.

Table names

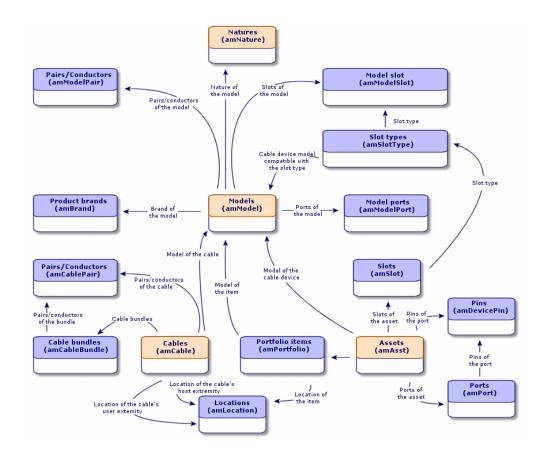
Natures (amNature)

Access menu

Portfolio/ Natures

Simplified data model

Figure 3.7. Cables and cable devices - data model



Creating the natures of cables and cable devices

- 1 Display the list of natures (**Portfolio/ Natures**).
- 2 Create a nature for the cable devices and a nature for the cables.

Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Table 3.7. Natures reserved for cables and cable devices - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Name	Name	
Created	seBasis	Must be set to Asset for the cable devices and
		Cable for the cables.
Management con-	seMgtConstraint	Does not apply to cables. This field must be
straints		set to Unique asset tag for the cable devices.
Also create	seOverflowTbl	Does not apply to cables. This field must be
		set to None for the cable devices.
Cable device	bDevice	Does not apply to cables. This option must be
		checked for the cable devices.
Can be connected	bIsCnxClient	Does not apply to cables. This option must be
		checked for the cable devices.

Creating the natures of cables and cable devices for the practical case

We are going to create a nature for the cable devices and a nature for the cables.

- 1 Display the list of natures (**Portfolio/ Natures**).
- 2 Create a new record per nature and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (Name)	Cable	Cable device
Created (seBasis)	Cable	Portfolio item
Management constraints (seMgtConstraint)	Do not populate.	Unique asset tag
Also create (seOverflowTbl)	Do not populate.	None
Cable device (bDevice)	Do not populate.	Check

Field or link to populate	Value for record 1	Value for record 2
Can be connected (blsCnxCli -	Do not populate.	Check
ent)		

Brands of cable and cable device models

Table names

Brands (amBrand)

Access menu

Portfolio/ Brands

Creating the brands of the cable and cable device models

- 1 Display the list of brands (**Portfolio/ Brands**).
- 2 Create one record per brand of cable device and cable of your network.

Prerequisites

No prerequisites.

Fields and links that must absolutely be populated

Table 3.8. Brands of cable and cable device models - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name

Creating the brands of the cable and cable device models for the practical case

We are going to create the brands of the cable devices and cables for our practical case. You will then be able to associate them with the models that you will create later.

- 1 Display the list of brands (**Portfolio/ Brands**).
- 2 Create a new record per brand and populate the following fields:

Field or link to pop- ulate	Value for record 1	Value for record 2	Value for record 3	Value for record 4
Name (Name)	Corel	Hewlett Packard	ITT	Generic

Cable models

The cable models enable you to create the cables in your network in the **Cables** table (**amCable**).

Definitions

▶ Cable [page 173]

Table names

- Models (amModel)
- Pairs/Conductors (amCablePair)

Access menu

Portfolio/ Models

Creating cable models

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a record for each cable model in your network.
- 3 Associate pairs/conductors with the cable model. You have the following possibilities:
 - Add each pair/conductor manually by clicking +.
 - Launch the **Create pairs** wizard.

Prerequisites

You should have already created:

- A nature for the cables.
- The brands of the cables.
- Label rules.
- Cable types.
- Color codes.
- Pair/ Conductor types.

Fields and links that must absolutely be populated

Table 3.9. Cable models - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Models table (amModel)		
Name	Name	
Nature	Nature	Must be a cable nature.
Label rule	LabelRule	
Cable type	CableType	
Color code	ColorCode	If you want the pairs/conduct- ors to be identified by a color code.
Model pairs/conductors	Pairs	
Pairs/Conductors table (a	ımModelPair)	
Name	Name	
#	sSequenceNumber	
Pair/Conductor type	CabPairType	
Color code entry	ColorCodeDet	If you selected a color code at the level of the cable model.
		the level of the cable model.

Create pairs wizard

Functions performed by the wizard

This wizard generates pairs having the same type.

Prerequisites

You should have already created:

♦ Pair/ Conductor types

Launching the wizard

To access this wizard, you need to select a record or field (not a link) in the ${\bf Models}$ table (${\bf amModel}$):

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Select the model in the list window, or select a field (not a link) in the **Models** table.
- 3 Select the **Create pairs** wizard.

Information used when using the wizard

Table 3.10. Create pairs wizard - description of fields to populate

Label displayed by the wizard	Explanations	
Default type for each	The selected value populates the Pair/conductor type link	
pair/conductor created.	(CabPairType) of each pair/conductor created.	
Number to begin with	For example, enter 1 if you want to create 4 numbered pairs from 1 to 4. Enter 5 if you want to create 4 numbered pairs from 5 to 8.	
	This number populates the # field (sSequenceNumber) of the model pairs.	
	The number displayed by default in this field corresponds to	
	the largest value that already exists in the # field (sSequen-	
	ceNumber), plus 1 (if the model contains 4 pairs, numbered	
	1 through 4, this number will be 5).	
	The pair number is linked with the number of the color code entries of the model in order to associate a color code entry to a pair/conductor.	

Data created or modified by the wizard

The wizard creates records in the **Pairs/Conductors** table (**amModelPair**). The wizard populates the following fields:

Table 3.11. Create pairs wizard - created or modified data

Field label	SQL name of the field	Explanations
Name	Name	The same value as the # field (sSequen-
		ceNumber).
#	sSequenceNumber	A sequential number just after the largest
		value already existing in the # field
		(sSequenceNumber).
Pair/Conductor type	CabPairType	The pair/conductor type is selected using the wizard.
Color code entry	ColorCodeDet	Color code entry associated with the cable
Color code entry	ColorCodeDet	whose number (sSequenceNumber) corresponds to the number of the conductor pair (sSequenceNumber).

Viewing the result

The easiest way to view the result of this wizard is to look at the **Cable** tab of the model.

After having launched the wizard

You need to edit the pairs/conductors manually if you want to change certain information relating to them.

Creating the cable models for the practical case

We are going to create a 32-pair cable model (for the telephone riser) and a 4-pair cable model (for the given lateral and riser cables).

Creating the models

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a new record per model and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (Name)	L 120 - Category 5 - 32 twisted	FTP - Category 5 - 4 twisted
	pairs	pairs
Nature (Nature)	Cable	Cable
Brand (Brand)	Corel	Corel
Label rule (LabelRule)	Practical case - Cables	Practical case - Cables
Cable type (CableType)	Twisted pairs	Twisted pairs
Color code (ColorCode)	568B - 32 pairs	568B - 4 pairs

Creating the pairs/conductors for each cable model

- 1 Select the model.
- 2 Launch the **Create pairs** wizard one time for each model, and specify the following values:

Label displayed by the wizard	Value for the L 120 - Category 5 - 32 twisted pairs cable	Value for the FTP - Category 5 - 4 twisted pairs cable
Number of pairs/conductors to generate	32	4
Default type for each pair/con- ductor created	Copper	Copper

Label displayed by the wizard		Value for the FTP - Category 5 - 4 twisted pairs cable
Number to begin with	1	1

Cable device models without slots.

Definitions

▶ Cable device [page 177]

Table names

- Models (amModel)
- Model ports (amModelPort)

Access menu

Portfolio/ Models

Creating the models of cable devices without slots

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a record for each cable device model in your network.
- 3 Add ports to the model.

You have the following choices:

- Add each port manually by clicking +.
- Launch the **Create ports** wizard.

Prerequisites

You should have already created:

- A nature for the cable devices.
- The brands of the cable devices.
- Label rules.
- Device types.
- Connection types.
- Duties.

Fields and links that must absolutely be populated

Table 3.12. Models of cable devices without slots - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Models <i>table</i> (amModel)		
Name	Name	
Nature	Nature	Must be a cable device nature.
Label rule	LabelRule	
Device type	DeviceType	
Number of pins/terminals	lPins	If the device is connected to
		the network by pins on at least
		one side.
Number of sides	seDevSdType	
Ports	Ports	If the device is connected to
		the network by ports on all
		sides.
Ports table (amModelPort)		
Port #	PortNo	If you create ports.
#	sSequenceNumber	If you create ports.
Connection type	CabCnxType	If you create ports.
Function	Duty	If you create ports.

Connection by ports or by pins

There are two connection modes for the cable devices:

- By ports
- By pins

If the device is connected to the network by ports on all sides:

- Assign the value **0** to the **Number of pins/terminals** field (**IPins**).
- Create the Ports links (Ports). These ports will be associated with the cable bundles using the Cable links table (amCableLink).

If the device is connected to the network by pins on at least one side:

- Populate the Number of pins/terminals field (IPins) with the total number of pins contained by the cable device.
- Only create the **Ports** (**Ports**) link if you want to use the cabling wizards to create cable links to the device pins. In effect, such wizards create virtual ports that they associate automatically to the existing pins that are free.

Create ports wizard

Functions performed by the wizard

This wizard generates ports having the same duty and the same connection type.

Prerequisites

You should have already created:

- Connection types
- Functions

Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Models** table (**amModel**):

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Select the model in the list window, or select a field (not link) in the **Models** table.
- 3 Select the **Create ports** wizard.

Information used when using the wizard

Table 3.13. Create ports wizard - description of fields to populate

Label displayed by the wizard	Explanations
Default type for each port created	The selected value populates the Connection
	type link (CabCnxType) of each port created.
Type of duty by default for each port created	The selected value populates the Duty link
	(Duty) of each port created.
Number to begin with	For example, enter 1 if you want to create 4 numbered ports from 1 to 4. Enter 5 if you want to create 4 numbered ports from 5 to 8.
	This number populates the Port # field (PortNo) of the model ports.
	The number displayed by default by the wizard corresponds to the largest existing port number plus 1 (if the model contains 4 ports, numbered 1 through 4, this number will be 5).

Data created or modified by the wizard

The wizard creates records in the **Model ports** table (**amModelPort**).

The wizard populates the following fields:

Table 3.14. Create ports wizard - data created or modified by the wizard

Field label	SQL name of the field	Explanations
Sequence number of	sSequenceNumber	A sequential number that begins with the
the port in the model		starting number specified using the wizard.
Port #	PortNo	A sequential number that begins with the
		starting number specified using the wizard.
Connection type	CabCnxType	The connection type selected using the wizard.
Function	Duty	The duty selected using the wizard.

Viewing the result

The easiest way to view the result of this wizard is to look at the **Ports** tab of the model.

After having launched the wizard

You need to edit the ports manually if you want to change certain information relating to them.

Creating the models of cable devices without slots for the practical case

We are going to create the models that will help create the following cable devices without slots:

- 3-port wall outlet
- Patch panels
- Switch modules

Creating the models

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a new record per model and populate the following fields:

Field or link to pop- ulate	Value for record 1	Value for record 2	Value for record 3	Value for record 4
Name (Name)	Procurve 10/100	24-port preloaded	32-port patch pan-	3-port wall outlet
	Base T - 8 ports	patch panel	el (256 pins)	
Nature (Nature)	Cable device	Cable device	Cable device	Cable device
Brand (Brand)	Hewlett Packard	Generic	Generic	ITT
Device type	Switch module	Patch panel	Patch panel	Wall outlet
(DeviceType)				

Field or link to pop- ulate	Value for record 1	Value for record 2	Value for record 3	Value for record 4
Number of pins/terminals (IPins)	0	0	256	24
Number of sides (seDevSdType)	Single sided	Double sided	Double sided	Single sided

Creating the ports for each device model for which the network connection is established by ports

For each model whose Number of pins/terminals (IPins) is null:

- 1 Select the **Procurve 10/100 Base T- 8 ports** model.
- 2 Launch the **Create ports** wizard one time by entering the following information:

Label displayed by the wizard	Value
Number of ports to generate	8
Default connection type for each port to generate	RJ45 - 568B - Port
Default type for each port created	Data
Number to begin with	1

- 3 Select the **24-port preloaded patch panel** model.
- 4 Launch the **Create ports** wizard one time by entering the following information:

Label displayed by the wizard	Value
Number of ports to generate	24
Connection type by default for each port to gener-	RJ45 - 568B - Port
ate	
Type of duty by default for each port created	Data
Number to begin with	1

Slot types

Definitions

▶ Slot type [page 187]

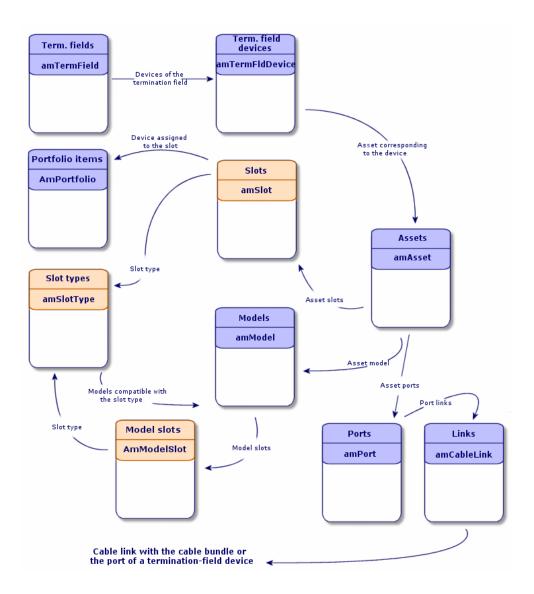
Table names

Slot types (amSlotType)

Access menu Cable/ Slot types

Simplified data model

Figure 3.8. Slots - data model



Creating slot types

1 Display the list of slot types (**Cable/ Slot types**).

2 Create a record per slot type of your termination-field devices.

Prerequisites

You need to have already created the models of modules or extensions to insert in the slots.

Fields and links that must absolutely be populated

Table 3.15. Slot types - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link
Name	Name
Compatible models	SlotTypeModels

Creating the slot types for the practical case

We are going to create a slot type for the **ProCurve Switch 4000 M - 10** slots model that will receive the **Procurve 10/100 Base T - 8 ports** models.

💋 Note:

You are going to create the **ProCurve Switch 4000 M - 10 slots** in another step.

- 1 Display the list of slot types (**Cable/ Slot types**).
- 2 Create a new record in the **Slot types** table (**amSlotType**) and populate the following fields:

Field or link to populate	Value
Name (Name)	8-port switch module
Compatible models (SlotTypeModels)	Procurve 10/100 Base T - 8 ports

Cable device models with slots.

Definitions

▶ Cable device [page 177]

Table names

- Models (amModel)
- Model slots (amModelSlot)
- Model ports (amModelPort)

Access menu

Portfolio/ Models

Creating the models of cable devices with slots

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a record for each cable device model in your network.
- 3 Associate ports or slots to the model.

You have the following choices:

- Add each port or slot manually by clicking +.
- Launch either the **Create ports** or **Create slots** wizard.

Connection by ports or by pins

▶ Connection by ports or by pins [page 61]

Create ports wizard

Create ports wizard [page 62]

Prerequisites

You should have already created:

- A nature for the cable devices.
- The brands of the cable devices.
- Label rules.
- Device types.
- Connection types.
- Duties.
- Slot types.

Fields and links that must absolutely be populated

Table 3.16. Models of cable devices with slots - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Models <i>table</i> (amModel)		
Name	Name	
Nature	Nature	Must be a cable device nature.
Label rule	LabelRule	
Device type	DeviceType	
Number of pins/terminals	lPins	If the device is connected to
		the network by pins on at least one side.
Number of sides	seDevSdType	
Ports	Ports	If the device is connected to the network by ports on all sides.
Model slots	ModelSlots	If the device must receive con- nection modules in its slots.
Ports table (amPort)		
Port #	PortNo	If you create ports.
#	sSequenceNumber	If you create ports.
Connection type	CabCnxType	If you create ports.
Function	Duty	If you create ports.
Model slots table (amMode	ISIot)	
Name	Name	If you create slots.
#	sSequenceNumber	If you create slots.
Slot type	SlotType	If you create slots.

Create slots wizard

Functions performed by the wizard

This wizard generates slots having the same type.

Prerequisites

You should have already created:

♦ Slot types

Launching the wizard

To access this wizard, you need to select a record or select a field (not a link) in the **Models** table (amModel).

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Select the model in the list window, or select a field (not a link) in the **Models** table.
- 3 Select the **Create slots** wizard.

Information used when using the wizard

Table 3.17. Create slots wizard - description of fields to populate

Label displayed by the wizard	Explanations
Default type for each slot created	The selected value populates the Slot type
	link (SlotType) of each slot created.
Number to begin with	For example, enter 1 if you want to create 4 numbered slots from 1 to 4. Enter 5 if you want to create 4 numbered slots from 5 to 8.
	This number populates the # field (sSequen- ceNumber) and Name field (amModelSlot) of the model slots.
	The number displayed by default by the wizard corresponds to the largest existing slot number plus 1 (if the model contains 4 slots, numbered 1 through 4, this number will be 5).

Data created or modified by the wizard

The wizard creates records in the **Model slots** table (**amModelSlot**). The wizard populates the following fields:

Table 3.18. Create slots wizard - created or modified data

Field label	SQL name of the field	Explanations
Name	Name	A sequential number that begins with the
		starting number specified using the wizard.
#	sSequenceNumber	A sequential number that begins with the
		starting number specified using the wizard.
Slot type	SlotType	The slot type selected using the wizard.

Viewing the result

The easiest way to view the result of this wizard is to look at the **Slots** tab of the model.

After having launched the wizard

You need to edit the slots manually if you want to change certain information relating to them.

Creating the models of cable devices with slots for the practical case

We are going to create the model of a modular switch that has 10 slots:

Creating the model

- 1 Display the list of models (**Portfolio/ Models**).
- 2 Create a new record and populate the following fields:

Field or link to populate	Value
Name (Name)	ProCurve Switch 4000 M - 10 slots
Nature (Nature)	Cable device
Brand (Brand)	Hewlett Packard
Device type (DeviceType)	Switch
Number of pins/terminals (IPins)	0
Number of sides (seDevSdType)	Single sided

Creating the slots

- 1 Select the **ProCurve Switch 4000 M 10 slots** model.
- 2 Launch the **Create slots** wizard one time for each model, and specify the following values:

Label displayed by the wizard	Value
Number of slots to generate	10
Default type for each slot created	8-ports switch module
Number to begin with	1

Topologies

Definitions

- ▶ Topology [page 185]
- Topology step [page 179]
- ▶ Host [page 181]

▶ User [page 188]

Table names

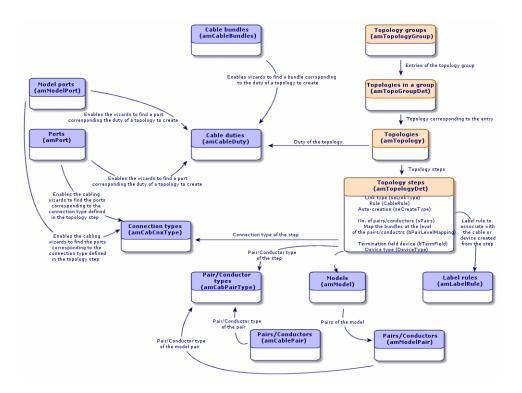
- Topologies (amTopology)
- Topology steps (amTopologyDet)

Access menu

Cable/ Topologies

Simplified data model

Figure 3.9. Topologies - data model



Creating topologies

- 1 Display the list of topologies (**Cable/ Topologies**).
- 2 Create a topology and its steps for each standard trace of your network.

Topology example

The topology of a telephone connection between the standard user and the floor's termination field is composed of the following steps:

- 1 A link at the level of the wall outlet.
- 2 A link at the level of a lateral cable.
- 3 A link at the level of a termination-field device.

Prerequisites

You should have already created the:

- Duties
- Label rules
- Cable types
- Pair/conductor types
- Device types
- Connection types
- Roles
- Models of cables and cable devices to create from the topology step.

Fields and links that must absolutely be populated

Table 3.19. Topologies - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Topologies table (amTopolog	gy)	
Name	Name	
Direction	seTraceDir	
Function	Duty	
Topology steps	Detail	
Topology steps table (amTop	pologyDet)	
#	sSequenceNumber	
Link type	seLinkType	
Label rule	LabelRule	
Cable type	CableType	If seLinkType = Cable
Device type	DeviceType	If seLinkType = Device
Pair/Conductor type	CabPairType	If seLinkType = Cable
Connection type	CabCnxType	If seLinkType = Device
Map bundles at pair/conductor	bPairLevelMapping	If seLinkType = Cable
level		
Termination-field device	bTermField	If seLinkType = Device
No. of pairs/conductors	sPairs	If seLinkType = Cable
Auto-create	seCreateType	

Label of the field or link	SQL name of the field or link	Remarks
Model	Model	If seCreateType <> Never
		create
Role	CableRole	If seLinkType = Cable
		• or bTermField = Yes

Creating the topologies for the practical case

We are going to create two topologies:

- Data connection between the wall outlet and the floor's termination field.
- Telephone connection between the wall outlet and the floor's termination field.

These topologies break down into three steps:

- 1 A link at the level of the wall outlet.
- 2 A link at the level of the lateral cable.
- 3 A link at the level of the termination-field device.

These topologies are then assembled together in a group of topologies.

Creating the topologies

- 1 Display the list of topologies (**Cable/ Topologies**).
- 2 Create a new record per topology and populate the following fields:

Field or link to populate	Value for record 1	Value for record 2
Name (Name)	Telephone outlet to termination	Local network outlet to termina-
	field.	tion field
Direction (seTraceDir)	User to host	User to host
Duty (Duty)	Voice	Data

Creating the steps for the Telephone outlet to termination field topology

- 1 Select the topology.
- 2 Create step 1 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	1
Cable link type (seLinkType)	Device
Termination field device (bTermField)	Unselect the box.
Label rule (LabelRule)	Practical case - Wall outlet link
Connection type (CabCnxType)	RJ45 - 568B - Pin
Device type (DeviceType)	Wall outlet

Field or link to populate	Value
Auto-create (seCreateType)	Create if not available
Model (Model)	3-port outlet

3 Create step 2 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	2
Cable link type (seLinkType)	Cable
Role (CableRole)	Lateral
Label rule (LabelRule)	Practical case - Link - Sequen-
	tially, by pairs
Pair/ Conductor type (CabPairType)	Copper (2)
Cable type (CableType)	Twisted pairs
Auto-create (seCreateType)	Always create
Map bundles at pair/conductor level (bPairLevelMapping)	Check this selection box.
No. of pairs/conductors (sPairs)	2
Model (Model)	FTP - Category 5 - 4 twisted
	pairs

4 Create step 3 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	3
Cable link type (seLinkType)	Device
Termination field device (bTermField)	Check this selection box.
Role (CableRole)	Lateral
Label rule (LabelRule)	Practical case - Port of a termin-
	ation-field patch panel link
Connection type (CabCnxType)	RJ45 - 568B - Pin
Device type (DeviceType)	Patch panel

Creating the steps for the Local network outlet to termination field topology

- 1 Select the topology.
- 2 Create step 1 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	1
Cable link type (seLinkType)	Device
Termination field device (bTermField)	Unselect the box.

Field or link to populate	Value
Label rule (LabelRule)	Practical case - Wall outlet link
Connection type (CabCnxType)	RJ45 - 568B - Pin
Device type (DeviceType)	Wall outlet
Auto-create (seCreateType)	Create if not available
Model (Model)	3-port outlet

3 Create step 2 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	2
Cable link type (seLinkType)	Cable
Role (CableRole)	Lateral
Label rule (LabelRule)	Practical case - Link - Sequen-
	tially, by pairs
Pair/ Conductor type (CabPairType)	Copper (2)
Cable type (CableType)	Twisted pairs
Auto-create (seCreateType)	Always create
Model (Model)	FTP - Category 5 - 4 twisted
	pairs
Map bundles at pair/conductor level (bPairLevelMapping)	Check this selection box.
No. of pairs/conductors (sPairs)	4

4 Create step 3 by populating the following fields:

Field or link to populate	Value
# (sSequenceNumber)	3
Cable link type (seLinkType)	Device
Termination field device (bTermField)	Check this selection box.
Role (CableRole)	Lateral
Label rule (LabelRule)	Practical case - Port of a termin-
	ation-field patch panel link
Connection type (CabCnxType)	RJ45 - 568B - Port
Device type (DeviceType)	Patch panel

Topology groups

Definitions

▶ Topology group [page 181]

Table names

- Topology groups (amTopologyGroup)
- Topologies in a group (amTopoGroupDet)

Access menu

Cable/ Topology groups

Simplified data model

Figure 3.10. Topology groups - data model

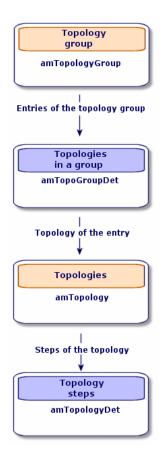
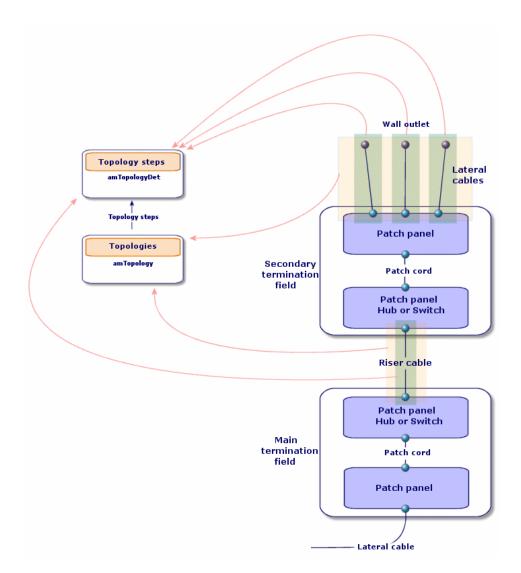


Figure 3.11. Topologies - correspondence between the termination field of a network



Creating topology groups

- 1 Display the list of topology groups (**Cable/ Topology groups**).
- 2 Create one record per configuration type of your network.

Example - A standard workstation is composed of 3 topologies:

- Telephone outlet to a termination field.
- Local network outlets to a termination field.
- Local network outlets to termination field.

Prerequisites

You need to have already created the topologies.

Fields and links that must absolutely be populated

Table 3.20. Topology groups - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	
Topology groups table (amTopologyGro	oup)	
Name	Name	
Topologies of the group	TopoGrpDetail	
Topologies in a group <i>table</i> (amTopoGroupDet)		
#	sSequenceNumber	

Creating the topology groups for the practical case

We are going to create a group of topologies that reunite the following topologies:

- 1 telephone outlet to a termination field.
- 2 local network outlets to a termination field.

Creating the topology group

- 1 Display the list of topology groups (**Cable/ Topology groups**).
- 2 Create a record and populate the following fields:

Field or link to populate	Value
Name (Name)	Standard workstation

Adding topologies to the Standard workstation group

- 1 Select the **Standard workstation** topology group.
- 2 Add topology 1 by populating the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	1

Field or link to populate	Value
Topology (Topology)	Telephone outlet to termination field.

3 Add topology 2 by populating the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	2
Topology (Topology)	Local network outlet to termination field

4 Add topology 3 by populating the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	3
Topology (Topology)	Local network outlet to termination field

Termination-field configurations

Definitions

▶ Termination-field configuration [page 176]

Table names

- Termination field configurations (amTermFldConfig)
- Termination-field configuration duties/services (amTermFldCfgDuty)
- Termination field configuration roles and devices (amTermFldCfgRole)

Access menu

Cable/ Termination field configurations

Simplified data model

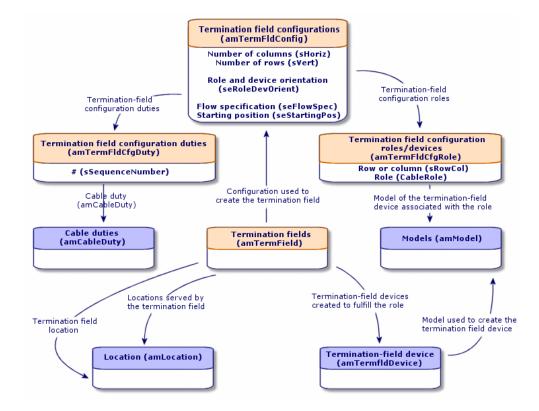


Figure 3.12. Termination-field configuration - data model

Parameters of a termination-field configuration

A termination-field configuration defines numerous parameters that are used by the cabling wizards to create a termination field.

The following diagrams will explain how these parameters are interpreted when you create a termination field.

Figure 3.13. Example of termination-field configuration - representation in AssetCenter

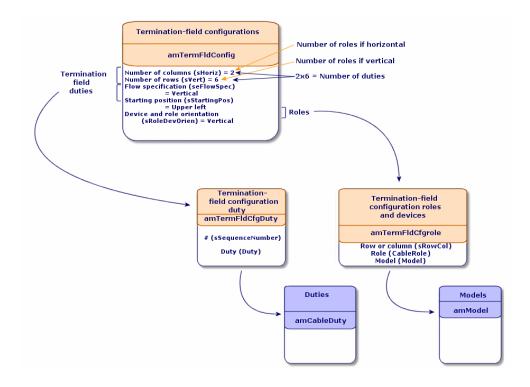
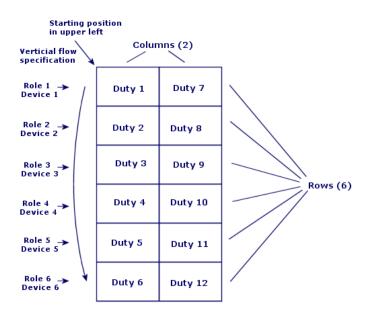


Figure 3.14. Example of termination-field configuration - correspondence at the termination field level



Role and device orientation = Vertical

Figure 3.15. Termination-field configuration - example of the impact resulting from changing the starting position

If starting	·		Lower right
	D12	D6	
	D1 1	D5	
	D10	D4	
	D9	D3	
	D8	D2	
	D7	D1	
"Duto"			•



Figure 3.16. Termination-field configuration - example of the impact resulting from changing the cable device and role orientations

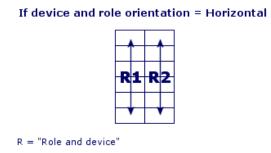


Figure 3.17. Termination-field configuration - example of the impact resulting from changing the flow specification

If flow spec	ificat	ion =	Horizontal
	D1	D2	
	D3	D4	
	D5	D6	
	D7	D8	
	D9	D10	
	D1 1	D12	

D="Duty"

Starting position

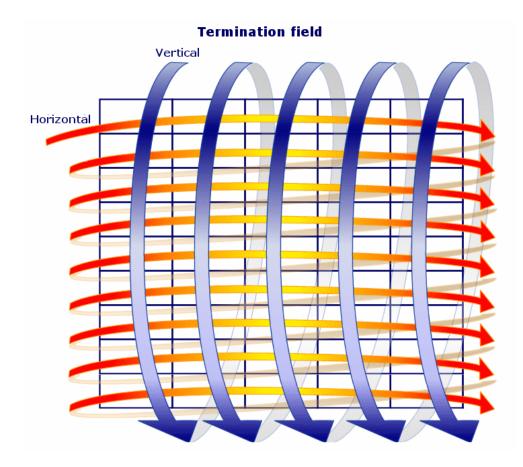
Figure 3.18. Termination-field configuration - signification of the starting positions

	Terminac	ion netu	
Upper left			Upper right
Lower left			Lower right

Termination field

Flow specification

Figure 3.19. Termination-field configuration - signification of the flow specification



Creating termination-field configurations

- 1 Display the list of termination-field configurations (**Cable/ Termination field configurations**).
- 2 Create one record per termination-field type of your network.

Prerequisites

You should have already created the:

- Functions
- Label rules
- Roles
- Termination-field configuration models

Fields and links that must absolutely be populated

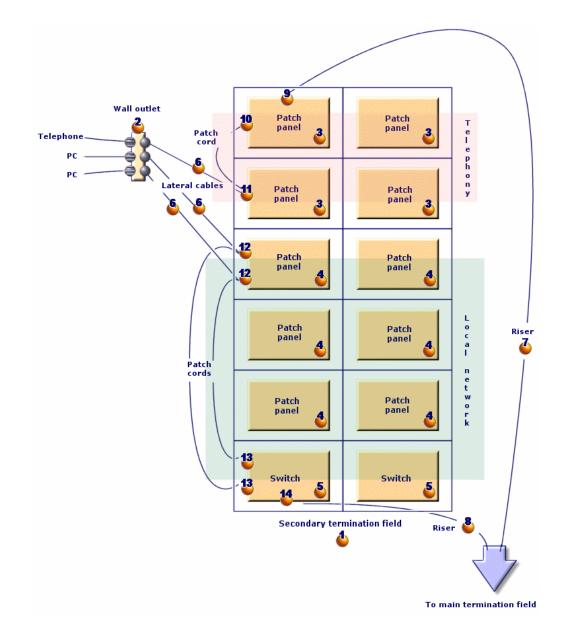
Table 3.21. Termination-field configurations - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link			
Termination field configurations <i>table</i> (amTermFldConfig)				
Name	Name			
Number of columns	sHoriz			
Number of rows	sVert			
Flow specification	seFlowSpec			
Starting position	seStartingPos			
Termination field configuration duties/services	TermFldCfgDuty			
Role and device orientation	seRoleDevOrient			
Label rule	LabelRule			
Termination field configuration roles and	TermFldConfRoles			
devices				
Termination field configuration duties/se	rvices (amTermFldCfgDuty)			
#	sSequenceNumber			
Function	Duty			
Termination field configuration roles and devices <i>table</i> (amTermFldCfgRole)				
Row or column	sRowCol			
Role	CableRole			
Model	Model			

Creating the termination-field configurations for the practical case

We are going to create a termination-field configuration based on the following model: $% \label{eq:configuration}$

Figure 3.20. Practical case - Termination-field configuration to create



Creating the termination-field configuration

- 1 Display the list of termination-field configurations (**Cable/ Termination** field configurations).
- 2 Create a record and populate the following fields:

Field or link to populate	Value
Name (Name)	Standard termination field
Number of columns (sHoriz)	2
Number of rows (sVert)	6
Flow specification (seFlowSpec)	Vertical
Starting position (seStartingPos)	Top-left
Role and device orientation (seRoleDevOrient)	Vertical
Label rule (LabelRule)	Practical case - Wallfield assets

Creating the duties of the Standard termination field configuration

- 1 Select the termination-field configuration.
- 2 Select the **Duties** tab and add duties by populating the following fields and links:

Field or link to populate	# (sSequenceNumber)	Duty (Duty)
Value for duty 1	1	Voice
Value for duty 2	2	Voice
Value for duty 3	3	Data
Value for duty 4	4	Data
Value for duty 5	5	Data
Value for duty 6	6	Data
Value for duty 7	7	Voice
Value for duty 8	8	Voice
Value for duty 9	9	Data
Value for duty 10	10	Data
Value for duty 11	11	Data
Value for duty 12	12	Data

Creating the roles of the Standard termination field configuration

- 1 Select the termination-field configuration.
- 2 Select the **Roles and devices** tab and add roles/devices by populating the following fields and links:

	Row or column (sRow- Col)	Role (CableRole)	Model (Model)
Value for role 1	1	Riser	32-port patch panel (256 pins)
Value for role 2	2	Lateral	32-port patch panel (256 pins)
Value for role 3	3	Lateral	24-port preloaded patch panel
Value for role 4	4	Lateral	24-port preloaded patch panel
Value for role 5	5	Lateral	24-port preloaded patch panel
Value for role 6	6	Riser	ProCurve Switch 4000 M - 10 slots

4 Termination fields

Definitions

▶ Termination field [page 184]

Table names

Termination fields (amTermField)

Access menu

Cable/ Termination fields

Creating termination fields

You can create the termination field manually or you can use one of the following wizards:

- Create a termination field
- Expand termination field
- Duplicate wiring closet

Prerequisites

You should have already created the:

- Termination-field configurations.
- Location of termination fields and work posts served by the termination fields.

- Duties
- Label rules
- Roles
- Termination-field device models.

Fields and links that must absolutely be populated

Table 4.1. Termination fields - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	
Termination fields table (amTermField)		
Name	Name	
Location	Location	
Termination field devices	TermFieldDevices	
User locations	UserLocs	
Termination field devices <i>table</i> (amTermFldDevice)		
Role	CableRole	
Label	Label	
Horizontal position	sHoriz	
#	sSequenceNumber	
Vertical position	sVert	

Creating termination fields manually

For each termination field in your network (main termination field or the one on each floor):

- 1 Display the list of termination fields (**Cable/ Termination fields**).
- 2 Create a record.
- ³ Create the termination-field slots using the **Termination field devices** link (**TermFieldDevices**).
- 4 Select the termination fields served by the termination field using the **User locations** link (**UserLocs**).

Create a termination field wizard

Functions performed by the wizard

The **Create termination field** wizard creates a termination field from a termination-field configuration.

Prerequisites

You should have already created the:

- Termination-field configurations
- Locations of the served termination fields and workstations.

Launching the wizard

Launching a wizard does not necessarily require that you be in a specific context. To launch a wizard:

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Create a termination field** wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

Information used when using the wizard

Table 4.2. Create a termination field wizard - description of fields to populate

Label displayed by the wizard	Explanations	
Configure the termination field <i>page</i>		
Automatically name the ter-	If you check this option, the wizard uses the TermFieldName	
mination field?	calculated field to populate the Name field (Name) of the	
	termination field.	
Termination field name	This field populates the Name field (Name) of the termination	
	field if you did not check the Automatically name the ter-	
	mination field option.	
Location of the termination	Select the termination field's location.	
field		
Termination-field configura-	Select the configuration that must be used as the model for	
tions	the creation of the termination field.	
Specify the options page		
Column	Indicate the number of termination field columns to create.	
	This number must be inferior or equal to the Number of	
	columns field (sHoriz) of the termination-field configuration.	
	The value of this field is proposed by default.	

Label displayed by the wizard	Explanations	
Line	Indicate the number of termination-field rows to create.	
	This number must be inferior or equal to the Number of rows field (sVert) of the termination-field configuration.	
	The value of this field is proposed by default.	
Auto-generate devices	If you check this option, the wizard creates a termination-field device for the termination-field slots.	
	The wizard uses the Model link (Model) for this, which is defined at the level of the termination-field configuration roles and devices.	
Select the label rule for new devices	Select the label rule to associate with the termination-field devices created by the wizard.	
	This label rule populates the devices' Label rule (LabelRule) link. It also populates the devices' Label field (Label) in refer- ence to this label rule.	
	The label rule that the wizard proposed by default is the rule selected using the Label rule link (LabelRule) of the termination-field configuration.	
Select a project and a wor		
Apply all changes to a pro-	Check this option if you want to:	
ject/work order:	 Keep a trace of the operations performed in the database at the project level. 	
	 Describe the actions that you need to perform for (during) the work order. 	
Projects	The project in which is stored a trace of the operations per- formed in the database by the wizard.	
Work orders	The work orders in which is described the actions that you must physically perform for the work order.	
Device comments	Enter the value to create for the Description field (Descrip-	
	tion) of the Assets included in projects table (amAstProj-	
	Desc).	
	This applies to all the devices created by the wizard.	

Data created or modified by the wizard

The wizard creates:

- 1 termination field (**amTermField**).
- Termination field devices (amTermFldDevice).
- The assets corresponding to the termination-field devices (**amAsset**).
- Ports for the devices (amPort).
- Slots for the devices (**amSlot**).
- Pins/terminals for the devices (amDevicePin).

The wizard populates the following fields:

Table 4.3. Create a termination field wizard - data created or modified by the wizard

Field label	SQL name of the	Evaluations
	field	Explanations
Termination fiel	d table (amTermF	ield)
Name	Name	The name that you selected using the wizard or the name
		determined by the TermFieldName calculated field.
Termination field	TermFldConfig	The configuration selected using the wizard.
configuration		
Location	Location	The location selected using the wizard.
Termination-field	TermField-	The wizard creates a device for each termination-field
devices	Devices	slot is created if you checked the Automatically gener-
		ate the devices option in the wizard.
User locations	UserLocs	The locations selected with the wizard.
Termination fiel		mTermFldDevice)
#	sSequenceNum-	Defined according to the termination-field configuration
	ber	parameters.
Horizontal posi-	sHoriz	Defined according to the termination-field configuration
tion		parameters.
Vertical position	sVert	Defined according to the termination-field configuration
D 1	() 11 P 1	parameters.
Role	CableRole	The Role field (CableRole) of the termination-field
		configuration role corresponding to the position of the
Desta	Derier	device in the termination field.
Device	Device	The device created by the wizard using the Model link
		(Model) of the termination-field configuration role cor-
		responding to the position of the device in the termina- tion field.
Assets table (am	Accot	tion neid.
Model	Model	The Model (Model) of the term in stice field configure
Model	Model	The Model (Model) of the termination-field configura- tion role corresponding to the position of the device in
		the termination field.
Label rule	LabelRule	Label rule selected using a wizard.
Label	Label	Label calculated by a wizard and based on the label rule
20,001	20001	of the device.
Slots	AssetSlots	Slots of the device model.
Device pins/ter-	Pins	AssetCenter creates as many pins as there are defined
minals		by the Number of pins/terminals field (IPins) of the
		model.
Ports	Ports	Ports of the device model.
Ports table (amP	'ort)	
Port #	PortNo	Same as for the model.
#	sSequenceNum-	Same as for the model.
	ber	
Connection type	CabCnxType	Same as for the model.
Status	seCnxStatus	Value set to Available by the wizard.

Field label	SQL name of the field	Explanations
Function	Duty	The Duty link (Duty) of the termination-field configur- ation duty defined for the device slot, of which the port is a part.
Slots table (amS	ot)	
Name	Name	Same as for the model.
#	sSequenceNum- ber	Same as for the model.
Slot type	SlotType	Same as for the model.
Pins table (amDe	evicePin)	
Name	Name	Automatic sequential number.
#	sSequenceNum- ber	Automatic sequential number.
Status	seCnxStatus	Value set to Available by the wizard.

Viewing the result

The termination field created can be viewed by selecting it in one of the following manners:

- Option 1:
 - 1 Display the list of termination fields (**Cable/ Termination fields**).
 - 2 Select the termination field created by the wizard.
- Option 2:
 - 1 Display the list of locations (**Portfolio/ Locations**).
 - 2 Select the location of the termination field created by the wizard.
 - 3 Select the Termination fields tab.
 - 4 Select the termination field created by the wizard.

After having launched the wizard

The wizard does not populate the **Device** link (**Asset**) of the termination field device slots.

You therefore need to:

- 1 Display the list of termination fields (**Cable/ Termination fields**).
- 2 Select the termination field created by the wizard.
- 3 Select the **Devices** tab.
- 4 One by one, select the devices with their slots, and for each one of them:
 - 1 Click the **Magnifier**.
 - 2 Click the **Magnifier** to the right of the **Device** link (**Device**).
 - 3 Select the **Slots** tab.
 - 4 One by one, select the slots to use, and for each one of them:

- 1 Click the **Magnifier**.
- 2 Populate the fields and links in the detail window.
- 5 Click **Modify**.
- 6 Click **Modify**.
- 7 Click Close.
- 5 Click **Modify**.

Use the Create a termination field wizard for the practical case.

We are going to create 1 termination-field column from the **Standard termination field** configuration. The second column will be added later using the **Expand termination field** wizard.

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the Create a termination field wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

3 Enter the following information:

Label displayed by the wizard	Value to enter or select
Configure the termination field <i>page</i>	
Automatically name the termination field?	Do not check this option.
Termination field name	Floor's termination field
Location of the termination field	Cabled building/1st floor/1st floor's wiring closet
Termination-field configurations	Standard termination field
Specify the options <i>page</i>	
Column	1
Line	6
Auto-generate devices	Check this selection box.
Select the label rule for new devices	Practical case - Wallfield assets
Locations served by the new termination field	Cabled building/1st floor/Office 1
Select a project and a work order <i>page</i>	
Apply all changes to a project/work order?	Check this selection box.
Projects	Create a termination field
Work orders	Select the work order proposed by the wizard.
Device comments	Install the device in termination field.

4 Add the modules in the slots of the **ProCurve Switch 4000 M - 10 slots** devices:

! Warning:

This will be done later on, according to the procedure described in section Creating the cable devices manually for the practical case [page 118] of this guide.

5 View the results created by the wizard by looking at the other tabs.

Expand termination field wizard

Functions performed by the wizard

The **Expand termination field** wizard adds rows or columns to an existing termination field from a termination-field configuration.

Prerequisites

You should have already created:

- The workstation locations served by the termination fields.
- The termination field to expand.

The existing termination field must have less rows or columns than the termination-field configuration.

Launching the wizard

To access this wizard, you must select a record or a field (not a link) from the **Termination fields** table (**amTermField**):

- 1 Display the list of termination fields (**Cable/ Termination fields**).
- 2 Select the termination field to expand from the list in the window.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Expand termination field** wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

Information used when using the wizard

Table 4.4. Expand termination field wizard - description of fields to populate

Label displayed by the wizard	Explanations
Specify the options page	
Column	Indicate the number of termination field columns to add.
	This number must be inferior or equal to the Number of columns field (sHoriz) of the termination-field configuration.
	The possible number of columns that you can add is proposed by default.
Line	Indicate the number of termination-field rows to add.
	This number must be inferior or equal to the Number of rows field (sVert) of the termination-field configuration.
	The possible number of rows that you can add is proposed by default.
Auto-generate devices	If you check this option, the wizard creates a termination-field device for the termination field slots.
	The wizard uses the Model link (Model) for this, which is defined at the level of the termination-field configuration roles and devices.
Select the label rule for new devices	Select the label rule to associate with the termination-field devices created by the wizard.
	This label rule populates the devices' Label rule link (Label-Rule).
	The wizard also populates the devices' Label field (Label) in reference to this label rule.
	The label rule that the wizard proposed by default is the rule selected using the Label rule link (LabelRule) of the termination-field configuration.
Select a project and a wor	
Apply all changes to a pro- ject/work order?	 Check this option if you want to: Keep a trace of the operations performed in the database at the project level.
	 Describe the actions that you need to perform for (during) the work order.
Projects	The project in which is stored a trace of the operations per- formed in the database by the wizard.
Work orders	The work orders in which is described the actions that you must physically perform for the work order.

Label displayed by the wizard	Explanations
Device comments	Enter the value to create for the Description field (Descrip -
	tion) of the Assets included in projects table (amAstProj-
	Desc). This applies to the devices created while extending the
	termination field.

Data created or modified by the wizard

The wizard creates:

- Termination field devices (amTermFldDevice)
- The assets corresponding to the termination-field devices (amAsset).
- Ports for the devices (amPort).
- Slots for the devices (**amSlot**).
- Pins/terminals for the devices (**amDevicePin**).

The wizard populates the following fields:

Table 4.5. Expand termination field wizard - data created or modified by the wizard

Field label	SQL name of the field	Explanations	
Termination field ta	Termination field <i>table</i> (amTermField)		
Termination-field	TermFieldDevices	The wizard creates a device for each termina-	
devices		tion-field slot is created if you checked the	
		Automatically generate the devices option	
		in the wizard.	
Termination field d	evices table (amTermF	ldDevice)	
#	sSequenceNumber	Defined according to the termination-field	
		configuration parameters.	
Horizontal position	sHoriz	Defined according to the termination-field	
		configuration parameters.	
Vertical position	sVert	Defined according to the termination-field	
		configuration parameters.	
Role	CableRole	The Role field (CableRole) of the termination-	
		field configuration role corresponding to the	
		position of the device in the termination field.	
Device	Device	The device created by the wizard using the	
		Model link (Model) of the termination-field	
		configuration role corresponding to the position	
		of the device in the termination field.	
Assets table (amAsset)			
Model	Model	The Model (Model) of the termination-field	
		configuration role corresponding to the position	
		of the device in the termination field.	
Label rule	LabelRule	The label rule selected using a wizard.	

Field label	SQL name of the field	Explanations
Label	Label	The label is calculated by a wizard and is based
		on the label rule of the device.
Slots	AssetSlots	Slots of the device model.
Device pins/terminals	Pins	AssetCenter creates as many pins as there are
		defined by the Number of pins/terminals
		field (IPins) of the model.
Ports	Ports	Ports of the device model.
Ports table (amPort)		
Port #	PortNo	Same as for the model.
#	sSequenceNumber	Same as for the model.
Connection type	CabCnxType	Same as for the model.
Status	seCnxStatus	Value set to Available by the wizard.
Function	Duty	The Duty link (Duty) of the termination-field
		configuration duty defined for the device slot,
		of which the port is a part.
Slots table (amSlot)		
Name	Name	Same as for the model.
#	sSequenceNumber	Same as for the model.
Slot type	SlotType	Same as for the model.
Pins table (amDevice	Pin)	
Name	Name	Automatic sequential number.
#	sSequenceNumber	Automatic sequential number.
Status	seCnxStatus	Value set to Available by the wizard.

Viewing the result

You can view the newly created termination field by selecting it in one of the following ways:

- Option 1:
 - 1 Display the list of termination fields (**Cable/ Termination fields**).
 - 2 Select the termination field created by the wizard.
- Option 2:
 - 1 Display the list of locations (**Portfolio/ Locations**).
 - 2 Select the location of the termination field created by the wizard.
 - 3 Select the **Termination fields** tab.
 - 4 Select the termination field created by the wizard.

After having launched the wizard

The wizard does not populate the following links:

- **User locations** link (**UserLocs**) of the termination fields (if it concerns locations served by the termination field).
- **Device** (**Asset**) of the termination-field device slots.

You therefore need to:

- 1 Display the list of termination fields (**Cable/ Termination fields**).
- 2 Select the termination field created by the wizard.
- 3 Select the **Served locations** tab.
- 4 One by one, add the locations served by the termination field.
- 5 Select the **Devices** tab.
- 6 One by one, select the devices with their slots, and for each one of them:
 - 1 Click the **Magnifier**.
 - 2 Click the **Magnifier** to the right of the **Device** link (**Device**).
 - 3 Select the **Slots** tab.
 - 4 One by one, select the slots to use, and for each one of them:
 - 1 Click the Magnifier.
 - 2 Populate the fields and links in the detail window.
 - 5 Click **Modify**.
 - 6 Click Modify.
 - 7 Click Close.
- 7 Click Modify.

Using the Expand termination field wizard in the practical case

We are going to add 1 column to the termination field that was previously created from the **Standard termination field** configuration.

- 1 Display the list of termination fields (**Cable/ Termination fields**).
- 2 Select the Floor's termination field.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Expand termination field** wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

5 Enter the following information:

Label displayed by the wizard	Value to enter or select
Specify the options page	
Line	0
Column	1
Auto-generate devices	Check this selection box.

Label displayed by the wizard	Value to enter or select
Select the label rule for new devices	Practical case - Wallfield assets
Select a project and a work order page	
Apply all changes to a project/work order?	Check this selection box.
Projects	Expand a termination field
Work orders	Select the work order proposed by the wizard.
Device comments	Install the device in termination field.

- 6 In a real-life situation, you would have to create the modules to insert in the slots of the **ProCurve Switch 4000 M 10 slots**. However, in this practical case, it is not required.
- 7 Look at the results:
 - Display the list of termination fields (Cable/ Termination fields).
 - Select the Floor's termination field.
 - Browse through the different tabs

Duplicate wiring closet wizard

Functions performed by the wizard

The **Duplicate wiring closet** wizard duplicates the termination fields of a source location into a target location.

ጆ Note:

This target location can already contain termination fields.

Prerequisites

You should have already created:

- The parent location of the new wiring closet.
- The wiring closet (location + termination fields) to duplicate.
- Locations of the served termination fields and workstations.

Launching the wizard

To access the wizard, you must select a record or a field (not a link) in the **Locations** table (**amLocation**):

- 1 Display the list of locations (**Portfolio/ Locations**).
- 2 Select any location from the list or select a field (not a link) in the **Locations** table.

- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Duplicate wiring closet** wizard.

Xote:

If this wizard does not appear in the list, select *Others*... at the end of the list.

Information used when using the wizard

Table 4.6. Duplicate wiring closet wizard - description of fields to populate

Label displayed by the wizard	Explanations
Select the source and destination location	ns page
Destination location	Select the location where you want to duplicate the source location.
Name of the new wiring closet	 If you leave this field empty, the wizard will only duplicate the termination fields from the source location in the target loca- tion.
	 If you populate this field, the wizard creates a sub-location in the target location.
	The source termination fields are duplic- ated in this sub-location.
Duplicate the sub-locations	If you check this option, the sub-locations of the source location are also duplicated.
Rename the new termination field automatic- ally	 If you check this option, the wizard uses the TermFieldName calculated field to populate the Name field (Name) of the termination field. If you don't check this option, the wizard duplicates the names of the source termination fields.
Refresh new termination-field device's labels	 If you check this option, the wizard recalculates the devices' Label field (Label) in reference to the label rule, selected by the devices' Label rule link (LabelRule). If you don't check this option, the wizard duplicates the labels of the source termin-
Select the termination field(s) to duplicate	ation-field devices.
Select the termination field(s) to duplicate	The wizard displays the termination fields of the selected, source location.

Label displayed by the wizard	Explanations
Select a project and a work order <i>page</i>	
Apply all changes to a project/work order?	Check this option if you want to:
	 Keep a trace of the operations performed in the database at the project level.
	 Describe the actions that you need to per- form for (during) the work order.
Projects	The project in which is stored a trace of the operations performed in the database by the wizard.
Work orders	The work orders in which is described the ac- tions that you must physically perform for the work order.
Device comments	Enter the value to create for the Description field (Description) of the Assets included in projects table (amAstProjDesc).
	This applies to all the devices created by the wizard.

Data created or modified by the wizard

The wizard creates:

- Locations (amLocation)
- Termination fields (amTermField)
- Termination field devices (amTermFldDevice)
- The assets corresponding to the termination-field devices (amAsset).
- Ports for the devices (amPort).
- Slots for the devices (**amSlot**).
- Pins/terminals for the devices (**amDevicePin**).

The wizard populates the following fields:

Table 4.7. Duplicate wiring closet wizard - data created or modified by the wizard

Field label	SQL name of the field	Explanations
Locations table (amLocation)	
Name	Name	 It is the value of the New wiring closet name field in the wizard, if you have populated it. Otherwise, it is the name of the target location that you have selected with the wizard.
Termination fiel	d table (amTermField)	

Field label	SQL name of the field	Explanations
Termination-field	TermFieldDevices	The wizard creates a record for each device in
devices		the source termination fields selected using
		the wizard.
User locations	UserLocs	The locations selected with the wizard.
Termination field de	evices table (amTermF	dDevice)
#	sSequenceNumber	Same as for the source device.
Horizontal position	sHoriz	Same as for the source device.
Vertical position	sVert	Same as for the source device.
Role	CableRole	Same as for the source device.
Device	Device	The device created by the wizard using the
		Model link (Model) of the source device.
Assets table (amAsse	et)	
Model	Model	Same as for the source device.
Label rule	LabelRule	Same as for the source device.
Label	Label	If you checked the Refresh new termina -
		tion field device's labels option in the
		wizard: It is the value calculated by the
		wizard in reference to this device's label
		rule.
		If you did not check this option: It is the
		same value as for the source device.
Slots	AssetSlots	Same as for the source device.
Device pins/terminals	Pins	Same as for the source device.
Ports	Ports	Same as for the source device.
Ports table (amPort)		
Port #	PortNo	Same as for the port of the source device.
#	sSequenceNumber	Same as for the port of the source device.
Connection type	CabCnxType	Same as for the port of the source device.
Status	seCnxStatus	Same as for the port of the source device.
Function	Duty	Same as for the port of the source device.
Slots table (amSlot)		
Name	Name	Same as for the slot of the source device.
#	sSequenceNumber	Same as for the slot of the source device.
#		
Slot type	SlotType	Same as for the slot of the source device.
		Same as for the slot of the source device.
Slot type	Pin) Name	Same as for the slot of the source device. Automatic sequential number.
Slot type Pins table (amDevice	Pin)	

Viewing the result

You can view the newly created termination field by selecting it in one of the following ways:

- Option 1:
 - 1 Display the list of termination fields (**Cable/ Termination fields**).

- 2 Select the termination field created by the wizard.
- Option 2:
 - 1 Display the list of locations (**Portfolio/ Locations**).
 - 2 Select the location of the termination field created by the wizard.
 - **3** Select the **Termination fields** tab.
 - 4 Select the termination field created by the wizard.

After having launched the wizard

The wizard does not populate the **Device** link (**Asset**) of the termination field device slots.

You therefore need to:

- 1 Display the list of termination fields (**Cable/ Termination fields**).
- 2 Select the termination field created by the wizard.
- 3 Select the **Devices** tab.
- 4 One by one, select the devices with their slots, and for each one of them:
 - 1 Click the **Magnifier**.
 - 2 Click the **Magnifier** to the right of the **Device** link (**Device**).
 - 3 Select the **Slots** tab.
 - 4 One by one, select the slots to use, and for each one of them:
 - 1 Click the **Magnifier**.
 - 2 Populate the fields and links in the detail window.
 - 5 Click **Modify**.
 - 6 Click **Modify**.
 - 7 Click **Close**.
- 5 Click **Modify**.

Use the **Duplicate wiring closet** wizard for the practical case.

We are going to duplicate the termination field of the floor's wiring closet, which was previously created in the main wiring closet.

- 1 Display the list of locations (**Portfolio/ Locations**).
- 2 Select the location: Cabled building / 1st floor / 1st floor wiring closet.
- **3** Display the list of actions (**Tools/ Actions**).
- 4 Select the **Duplicate wiring closet** wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

5 Enter the following information:

Label displayed by the wizard	Value to enter or select	
Select the source and destination locations page		
Destination location	Cabled building/2ndfloor/Main wiring closet	
Name of the new wiring closet	Leave this field empty.	
Duplicate the sub-locations	Do not check this option.	
Rename the new termination field automatically	Check this selection box.	
Refresh new termination field device's labels	Check this selection box.	
Select the termination field(s) to duplicate page		
Select the termination field(s) to duplicate	Floor's termination field	
Locations served by the new termination field(s)	Cabled building/1st floor/1st floor wiring closet	
Select a project and a work order <i>page</i>		
Apply all changes to a project/work order?	Check this selection box.	
Projects	Duplicate a wiring closet	
Work orders	Select the work order proposed by the wizard.	
Device comments	Install the device in termination field.	

- 6 Select the termination field just created:
 - 1 Display the list of locations (**Portfolio/ Locations**).
 - 2 Select the Cabled building/2nd floor/Main wiring closet location.
 - 3 Select the Termination fields tab.
 - 4 Select the new termination field.
 - 5 Click the **Magnifier** button.
- 7 Rename the termination field to **Main termination field**.
- 8 Add the modules in the slots of the **ProCurve Switch 4000 M 10 slots** devices:

🐓 Warning:

This will be done later on, according to the procedure described in section Cable devices - manual creation [page 110].

9 Look at the results of the wizard's actions by browsing through the other tabs.

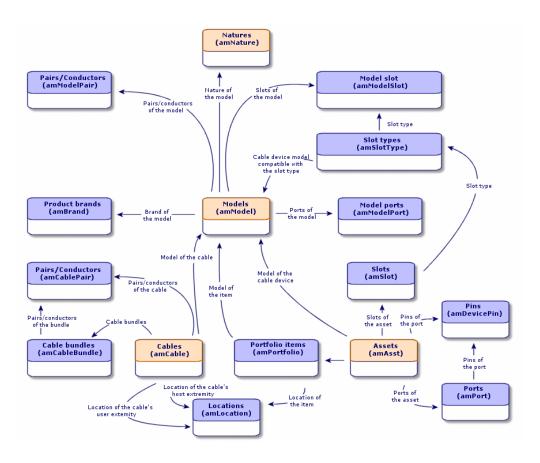
5 Cable devices, cables and connections manual creation

The cable devices, cables and cable links can be created manually or via the cabling wizards:

- Creating them manually requires more time, obviously, but it also allows you more control over the creation process.
- Creating them with wizards is more rapid, but you have less control.

💋 Note:

Let's recall that the cable devices are stored in the **Assets** table (**amAsset**), while the cables are stored in the **Cables** table (**amCable**). However, the models of these cable devices and cables come from the same table: **Models** (**amModel**).



Cable devices - manual creation

Definitions

- ▶ Cable device [page 177]
- ▶ Port [page 183]
- ▶ Pin/ Terminal [page 173]
- ▶ Slot [page 177]

Table names

Assets (amAsset)

- Ports (amPort)
- Pins (amDevicePin)
- Slots (amSlot)

Access menu

Cable/ Cable devices

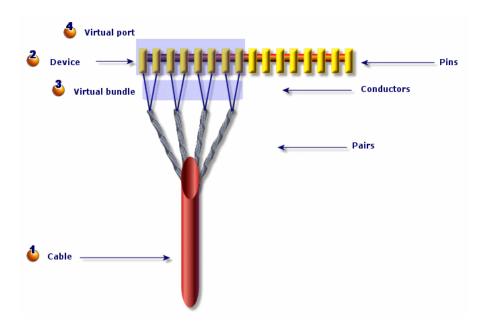
Letting AssetCenter create the ports and virtual bundles for pin connections

Certain cables/cable devices are composed of numerous bundles/pairs. It would be a tedious task to declare each bundle/pair manually. The cabling wizards are capable of creating virtual bundles and ports when they are required for a cable link. The virtual bundles and ports are also automatically deleted when the cable links that use them are no longer used.

💋 Note:

The wizards use the topologies to identify the models of the cables/cable devices and the pairs/pins.

Figure 5.2. Ports and virtual bundles - representation



• You start by creating a cable with its pairs, or you let the wizard create it.

Chen, you create a cable device with its pins, or you can let the wizard create it.

² The wizard creates a virtual bundle using the first available pairs.

The wizard creates a virtual port using the first available pins.

Single or double-sided devices

The cable devices can be single or double-sided. They are single-sided when the device ports or pins are all grouped together on one side. They are double-sided when the ports or pins are present on both sides of the device.

Example:

The patch panels are double-sided devices. The back side is frequently used to connect lateral or riser cables. The front side is often used to perform a patch to another patch panel.

When a device is double-sided, the cabling wizards can create more than one cable link on a given port of the device.

The single or double-sided feature of the cable devices is defined by the **Number** of sides field (seDevSdType) in the model.

The following diagram illustrates the different types of double-sided devices, depending on whether the connection is by pin or by port.

In each case, you will need to:

- Declare ports to the level of the device model.
- Populate the Number of pins/terminals field (IPins).

important:

It is very important to respect the directives of these diagrams if you want the wizards to correctly create the virtual ports.

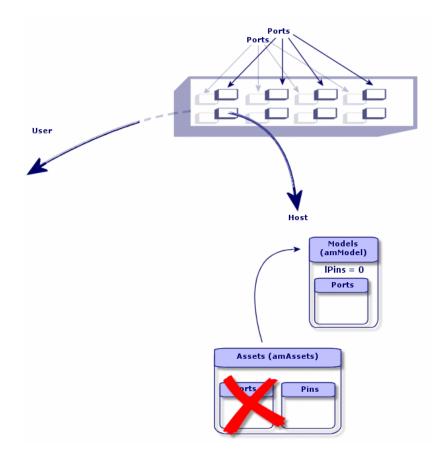
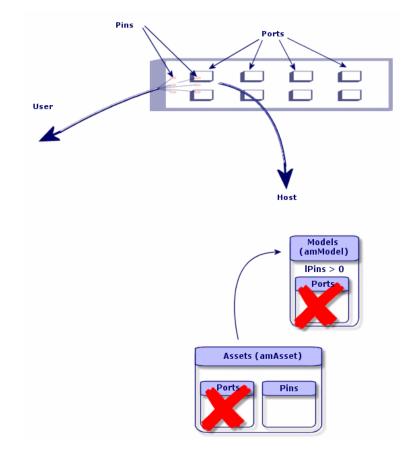


Figure 5.3. Double-sided devices (port/port) - representation

Figure 5.4. Double-sided devices (port/pins) - representation



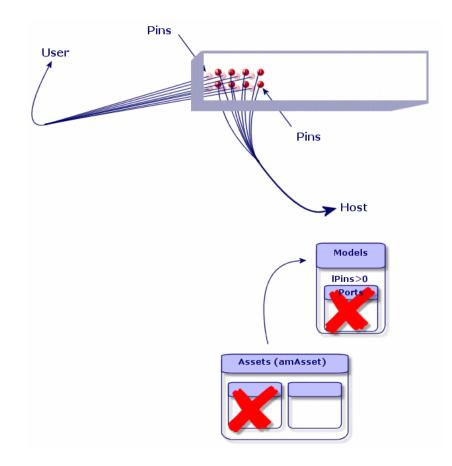


Figure 5.5. Double-sided devices (pin/pin) - representation

Creating cable devices manually

If you created appropriate device models, you just need to:

- 1 Display the list of assets (**Cable/ Cable devices**).
- 2 Click **New**.
- 3 Populate the following fields and links:
 - Model (Model)
 - Max no. connections (sMaxCnxCount)

4 Click Create.

The other fields and links to populate are automatically inherited from the model.

Prerequisites

You should have already created the:

- Cable device models (amModel)
- Label rules of the cable devices, ports, slots and pins/terminals (amLabelRule)
- Device types (amltemizedList)
- Cable connection types of the device ports (amCabCnxType)
- Duties of the device ports (amCableDuty)
- Slot types of the devices (amSlotType)
- Termination fields containing the devices (amTermField)
- Device locations (amLocation)

Label of the field on the COL and the field Demonstra

Modules to insert in the slots (amAsset)

Fields and links that must absolutely be populated

Table 5.1. Cable devices - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Assets table (amAsse	t)	
Model	Model	The model must have a cable device nature.
Portfolio items	Assignment	
Status	seCnxStatus	
Max no. connections	sMaxCnxCount	If you want to receive a warning - during a manual creation - in case you create more ports than what is defined by this field.
Device pins/terminals	Pins	If the device is connected to the network by pins.
Ports	Ports	If the device is connected to the network by ports.
Slots	AssetSlots	If the device must receive connection modules in its slots.
Label rule	LabelRule	
Label	Label	
Ports table (amPort)		
Port #	PortNo	If you create non-virtual ports.
#	sSequenceNumber	If you create non-virtual ports.
Connection type	CabCnxType	If you create non-virtual ports.
Function	Duty	If you create non-virtual ports.
Label rule	LabelRule	
Label	Label	
Status	seCnxStatus	

Label of the field or link	SQL name of the field or link	Remarks
Port pins/terminals	DevPin	
Slots table (amSlot)		
Name	Name	If you create slots.
#	sSequenceNumber	If you create slots.
Slot type	SlotType	If you create slots.
Assigned device	AssignedAsset	If you create slots, and they are occupied.
Pins table (amDevice	Pin)	
Name	Name	If you create pins.
#	sSequenceNumber	If you create pins.
Port	Port	If you create pins.
Status	seCnxStatus	If you create pins.
Label rule	LabelRule	If you create pins.
Label	Label	If you create pins.

Connection by ports or by pins

Connection by ports or by pins [page 61]

Double-sided devices

When a device contains ports and/or pins on 2 sides (a patch panel, for example), you need to proceed in one of the following manners:

- ♦ If the 2 sides contain ports:
 - 1 Create as many ports as there are on one side or the other of the device (this number should be the same on either side).
 - 2 The ports thus created will appear in two cable links: a host-side link (corresponding to the port on one of the sides) and a user-side link (corresponding to the port on the other side).
- If the 2 sides contain pins:
 - 1 Do not create any pins manually, unless you are not using cabling wizards to create cable links.
 - 2 The cabling wizards that create cable links will create virtual ports according to your needs as you go. The virtual ports thus created will appear in two cable links: a host-side link (corresponding to the pins on one of the sides) and a user-side link (corresponding to the pins on the other side).
- If 1 side contains ports and the other contains pins:
 - 1 Do not create any ports manually, unless you are not using cabling wizards to create cable links.
 - 2 Create the cable links on the pin side before creating them on the port side. The cabling wizards that create the cable links to the pins will create virtual ports according to your needs as you go. Each virtual port thus appears in a first cable link.

³ Create the cable links on the port side. The cabling wizards that create the cable links to the ports will use the existing virtual ports. The virtual ports thus associated appear in a second cable link.

Slots

If the device contains slots destined to receive connection modules:

- 1 Create the connection modules in the Assets table (amAsset).
- 2 Create the **Slots** links (**AssetSlots**) by associating them to a connection module.

Creating the cable devices manually for the practical case

We are going to:

- 1 Create 2 modules.
- 2 Insert the first module in one of the switch slots of this floor's termination field.
- 3 Insert the second module in one of the switch slots of the main termination field.

To do this:

- 1 Create the 2 modules. For each module:
 - 1 Display the list of assets (Cable/ Cable devices).
 - 2 Click **New**.
 - 3 Populate the following links and fields:

Field or link to populate	Value for record 1	Value for record 2
Model (Model)	Procurve 10/100 Base T - 8	Procurve 10/100 Base T - 8
	ports	ports
Max no. connections (sMax-	8	8
CnxCount)		
Asset tag (AssetTag	EXAMPLE005	EXAMPLE006

4 Click Create.

- 5 Certain fields and links are automatically inherited from the model. You can view this by looking at the different tabs of the module that was just created.
- 2 Associate one of the modules to one of the switch slots of this floor's termination field:
 - 1 Display the list of termination fields (**Cable/ Termination fields**).
 - 2 Select the Floor's termination field.
 - 3 Select the **Devices** tab.

- 4 Select one of the devices whose **Model** field (**Model**) has the value **ProCurve Switch 4000 M 10 slots**.
- 5 Click the **Magnifier** button.
- 6 Click the **Magnifier** button to the right of the **Device** link (**Device**).
- 7 Select the **Slots** tab.
- 8 Select one of the slots.
- 9 Click the **Magnifier** button.
- $10~{\rm Select}~{\rm the}~{\rm Assigned}~{\rm device}~{\rm field}~({\rm Assigned}{\rm Asset}).$
- 11 Select one of the **Hewlett Packard Procurve 10/100 Base T 8** ports devices that you just created.
- 12 Click Modify.
- 13 Click Modify.
- 14 Click Close.
- 3 Associate the other module with one of the switch slots of the main termination field:
 - 1 Display the list of termination fields (**Cable/ Termination fields**).
 - 2 Select the Main termination field.
 - 3 Select the **Devices** tab.
 - 4 Select one of the devices whose Model field (Model) is set to ProCurve Switch 4000 M 10 slots.
 - 5 Click the **Magnifier** button.
 - 6 Click the **Magnifier** button to the right of the **Device** field (**Device**).
 - 7 Select the **Slots** tab.
 - 8 Select one of the slots.
 - 9 Click the **Magnifier** button.
 - 10 Select the Assigned device field (AssignedAsset).
 - 11 Select one of the **Hewlett Packard Procurve 10/100 Base T 8 ports** devices that you just created.
 - 12 Click Modify.
 - 13 Click **Modify**.
 - 14 Click Close.

Cables - manual creation

Definitions

- ▶ Cable [page 173]
- Pair/conductor [page 182]
- Bundle [page 180]

Table names

- Cables (amCable)
- Pairs/Conductors (amCablePair)
- Cable bundles (amCableBundle)

Access menu

Cable/ Cables

Creating cables manually

If you created appropriate cable models, you just need to:

- $1 \quad \text{Display the list of cables (Cable/ Cables).}$
- 2 Click **New**.
- 3 Populate the **Model** link (**Model**).
- 4 Click Create.

The other fields and links to populate are automatically inherited from the model.

😯 Tip:

It is not necessary to create bundles manually. The cabling wizards can create virtual bundles for you.

▶ Cable devices - manual creation [page 110]

Prerequisites

You should have already created the:

- Cable models (amModel)
- Label rules of the cable devices, pairs/conductors and bundles (amLabelRule)
- Cable types (amltemizedList)

- Cable pair/conductor types (CabPairType)
- Duties of the cable bundles (amCableDuty)
- Locations of the host and user cables (amLocation)

Fields and links that must absolutely be populated

Table 5.2. Cables - Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link	Remarks
Cables table (amCable)		
Model	Model	The model must have a cable nature.
Label rule	LabelRule	
Label	Label	
User location	UserLoc	
Host location	HostLoc	
Role	CableRole	
Status	seCnxStatus	
Pairs/Conductors	Pairs	
Pairs/Conductors table (am	ModelPair)	
Name	Name	
#	sSequenceNumber	
Pair/Conductor type	CabPairType	
Color code entry	ColorCodeDet	If you selected a color code at the level of the cable model.

Creating the cables manually for the practical case

We are going to create an FTP cable - Category 5 - 4 twisted pairs with a bundle:

- 1 Display the list of cables (**Cable/ Cables**).
- 2 Click **New**.
- 3 Populate the following fields and links:

Field or link to populate	Value
Model (Model)	FTP - Category 5 - 4 twisted pairs
Code (Code)	Example001

4 Click Create.

5 Certain fields and links are automatically inherited from the model. You can view this by looking at the different tabs of the cable that was just created.

- 6 Select the **Bundles** tab.
- 7 Click the **+** button.
- 8 Populate the following fields and links:

Field or link to populate	Value
# (sSequenceNumber)	1
Name (Name)	1
Duty (Duty)	Data
Status (seCnxStatus)	Available

- 9 Click Add.
- 10 Select the bundle from the list.
- 11 Click the Magnifier.
- 12 Select the **Pairs/conductors** tab.
- 13 Add the 4 pairs of this cable to the bundle.
- 14 Click Modify.

Connections - manual creation

Definitions

- ▶ Cable link [page 182]
- ▶ Trace output [page 176]
- ▶ Trace [page 174]
- ▶ Cross connection [page 182]
- Host [page 181]
- ▶ User [page 188]

Table names

- Cable links (amCableLink)
- Trace outputs (amTraceOutput)
- Trace histories (amTraceHistory)
- Trace operations (amTraceOp)

Access menu

Cable/ Traces

Administration/List of screens

Simplified data model

Relationship between the cable links, device ports and cable bundles

Principals

The connections are made between cable bundles and ports of cable devices. These connections are represented by cable links. A cable link corresponds either to a port or a bundle, but not to both at the same time. Using the hierarchic link between two cable links, you can indicate that a port or a bundle is connected to a port or a bundle. There is thus no direct link between ports and bundles. Using the hierarchic links (which indicate that a such a cable link is a parent link or sub-link of another cable link), you can create a trace. The parent cable links must be on the "host" side, in other words, the most important side of the termination field.

Trace example

port -> bundle -> port

Correspondence between your network and the AssetCenter database

The following diagrams illustrate the way in which we represent a connection between a device port (a wall outlet, for example) and a cable bundle (a lateral cable, for example).

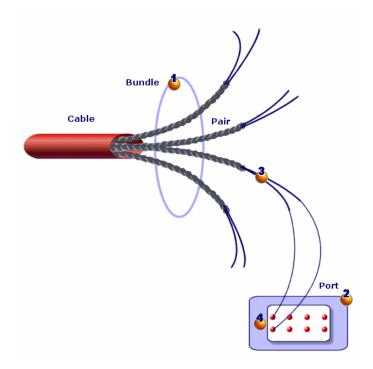
"Host" bundle to connect to "user" port.

"User" port to connect to "host" bundle.

"Host" cable link concerning the bundle. This link is the parent of the "user" link.

4 "User" cable link concerning the port. This link is the sub-link of the "host" link.

Figure 5.6. Cable link - representation of implicated components



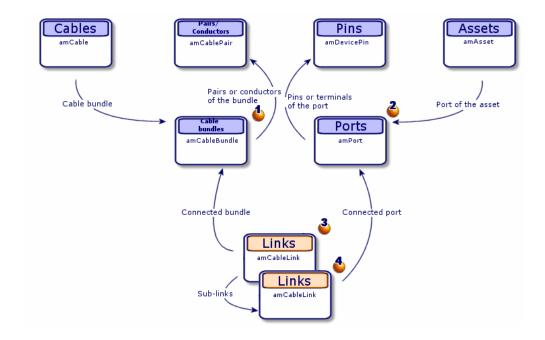
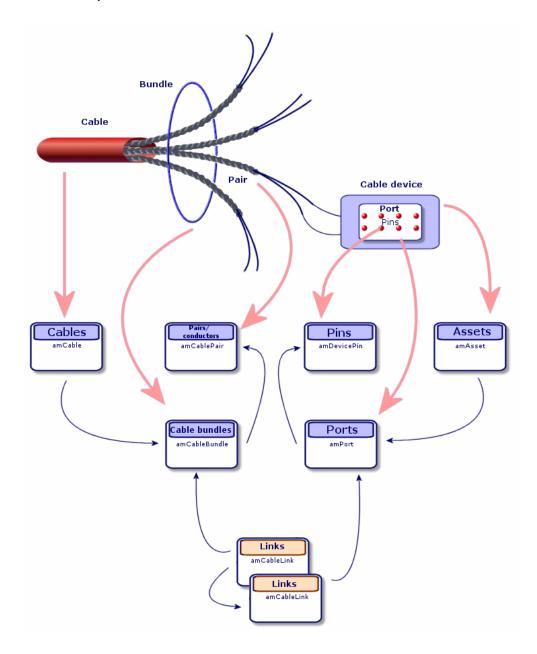
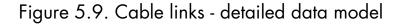


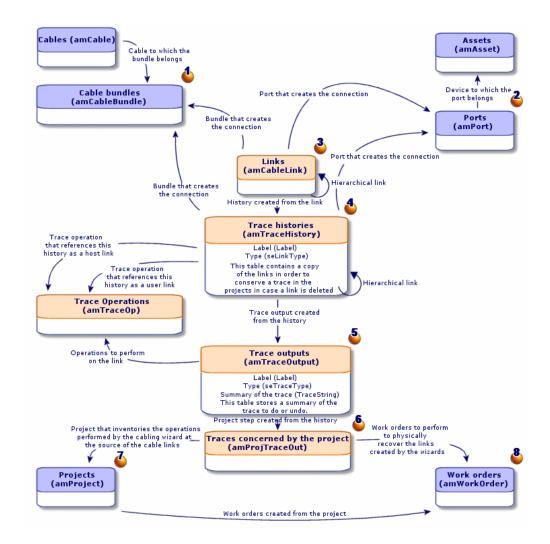
Figure 5.7. Cable links - simple data model

Figure 5.8. Cable links - correspondence between the cable link to represent and the database



Tables used in the complete description of the connections





Comments on the diagram

This diagram enables you to understand how the numerous tables, used in the description of the connections, work together.

Connected bundle.

Connected port.

Cable links concerning either a bundle or a port.

Copy of the cable link.

Description of the connection.

Intermediary table between projects/work orders and trace outputs.

Project enabling you to find the connection detail.

Work order that enables you to manage the implementation of the physical connection.

Creating connections manually

The following tables were not designed to be manually populated:

- amCableLink
- amTraceOutput
- amTraceHistory
- Trace operations

The explanations that we provide here are intended for those wanting to know more about how these tables function.

Before creating a connection manually:

1 Define the traces to represent.

Example: wall outlet->lateral cable->termination field

In general, a trace is composed of 2 cable devices linked by a cable.

- 2 Determine which direction you want to follow: host->user or user->host.
- 3 Begin with the very last point.

Examples:

- 1 If you create the cable links in the user->host direction, you will begin with a termination-field device.
- 2 If you create the cable links in the host->user direction, you will begin with a user wall outlet.
- 4 Create one cable link per connection point.

In general: 2 device links and 1 cable link.

Use the **Parent** link to connect the trace components.

For each trace to create:

- 1 Display the list of traces (**Cable/ Traces**).
- 2 Click **New**.
- 3 Populate the fields and links in the link window.
- 4 Display the list of screens (Administration/ List of screens).

- 5 Select the Trace outputs table (amTraceOutput).
- 6 Click **New**.
- 7 Populate the fields and links that are not inside the tabs of the detail window.
- 8 Click + in the following tabs:
 - 1 Trace history: This creates a record in the **Trace histories** table (**amTraceHistory**). Simply copy the information from the cable link detail and paste it here.
 - 2 Operation: This creates a record in the **Trace operations** table (**amTraceOp**).

Prerequisites

You should have already created:

- The cable devices (**amAsset**) to connect and their ports (**amPort**).
- The cables (**amCable**) to connect and their bundles (**amCableBundle**).
- The label rules for the cable links (**amLabelRule**).
- The cable duties (**amCableDuty**).

Fields and links that must absolutely be populated

Label of the field or link	SQL name of the field or link Remarks		
Cable links table (amCableL	ink)		
Name	Name		
Link type	seLinkType		
Parent link	Parent		
Label rule	LabelRule		
Label	Label		
Function	Duty		
Cable	Cable	If the cable link concerns a cable.	
Bundle	Bundle	If the cable link concerns a cable.	
Device	Device	If the cable link concerns a cable device.	
Port	Port	If the cable link concerns a cable device.	
Trace outputs table (amTrac	eOutput)		
Туре	seTraceType		
Function	Duty		
Label	ModifiedLinkLabel		

Label of the field or link	SQL name of the field or link	Remarks
Summary of the trace	TraceString	
Trace history	TraceHist	
Trace operations	TraceOps	
Trace histories table (amTra	ceHistory)	
Name	Name	
Туре	seLinkType	
Parent history	Parent	
Label	Label	
Cable	Cable	
Bundle	Bundle	
Device	Device	
Port	Port	
Link	Link	
Trace operations table (amT	raceOp)	
Title	Label	
Host trace history	HostTraceHist	
User trace history	UserTraceHist	

Creating the connections manually for the practical case

We are going to create a trace composed of the following cable links:

```
secondary termination-field device -> 4 twisted pairs -> principal termina
tion-field device
```

The direction of such a trace is user to host. We will thus begin by creating the host-side cable link.

Creating the cable links

- 1 Display the list of traces (Cable/ Links).
- 2 For each cable link, create a record and populate the following fields and links:

Field or link to populate	Value for record 1	Value for record 2	Value for record 3
Name (Name)	Example002	Example003	Example004
Cable link type	Device	Cable	Device
(seLinkType)			
Parent link (Parent)	Do not populate.	Device (Example002)	Cable (Example003)
Label rule (LabelRule)	Practical case - Port of	Practical case - Link -	Practical case - Port of
	a termination-field	Sequentially, by pairs	a termination-field
	patch panel link		patch panel link
Label (Label)	Do not enter any val-	Do not enter any val-	Do not enter any val-
	ues; accept the pro-	ues; accept the pro-	ues; accept the pro-
	posed default value.	posed default value.	posed default value.

Field or link to populate	Value for record 1	Value for record 2	Value for record 3
Duty (Duty)	Data	Data	Data
Cable (Cable)	Field not available.	Corel FTP - Category 5 - 4 twisted pairs (EX- AMPLE001)	Field not available.
Bundle (Bundle)	Field not available.	1 (EXAMPLE001)	Field not available.
Device (Device)	Hewlett Packard Pro- curve 10/100 Base T - 8 ports (EXAMPLE006)	Field not available.	Hewlett Packard Pro- curve 10/100 Base T - 8 ports (EXAMPLE005)
Port (Port)	1 (EXAMPLE006)	Field not available.	1 (EXAMPLE005)

Creating the trace history

- 1 Display the list of screens (Administration/List of screens).
- 2 Select the Trace outputs table (amTraceOutput).
- 3 Create a record and populate the following fields and links:

Field or link to populate	Value
Type (seTraceType)	Connect
Duty (Duty)	Data
Label (ModifiedLinkLabel)	'Data' riser run from location ' /Cabled building/2nd floor/Main
	wiring closet' to '/Cabled building/1st floor/1st floor wiring closet/'
Trace summary (TraceString)	Hewlett Packard Procurve 10/100 Base T - 8 ports (EXAMPLE005)
	- (1) <connecter> Corel FTP - Category 5 - 4 twisted pairs</connecter>
	(EXAMPLE001) - (1) <connecter> Hewlett Packard Procurve</connecter>
	10/100 Base T - 8 ports (EXAMPLE006) - (2)

Creating the trace histories for the trace output

- 1 Display the list of screens (Administration/ List of screens).
- 2 Select the Trace histories table (amTraceHistory).
- 3 Create a new record in the **Trace histories** table (**amTraceHistory**) and populate the following fields and links:

💋 Note:

Most of the information is duplicated from the cable link corresponding to the history.

Field or link to populate	Value for record 1	Value for record 2	Value for record 3
Name (Name)	Example002	Example003	Example004
Type (seLinkType)	Device	Cable	Device

Field or link to populate	Value for record 1	Value for record 2	Value for record 3
$Parent \ history \left(\textbf{Parent} \right)$	Do not populate.	Device (Example002)	Cable (Example003)
Label (Label)	Same as for links	Same as for links	Same as for links
Cable (Cable)	Field not available.	Corel FTP - Category 5	Field not available.
		- 4 twisted pairs (EX-	
		AMPLE001)	
Bundle (Bundle)	Field not available.	1 (EXAMPLE001)	Field not available.
Device (Device)	Hewlett Packard Pro-	Field not available.	Hewlett Packard Pro-
	curve 10/100 Base T - 8		curve 10/100 Base T - 8
	ports (EXAMPLE006)		ports (EXAMPLE005)
Port (Port)	1 (EXAMPLE006)	Field not available.	1 (EXAMPLE005)
Cable link (Link)	Device (Example002)	Cable (Example003)	Device (Example004)

Creating the trace operations for the trace outputs

There are two operations to perform:

- Connecting the main termination field to the cable.
- Connecting the cable to the secondary termination field.
- 1 Display the list of screens (Administration/ List of screens).
- 2 Select the Trace operations table (amTraceOp).
- 3 Create a new record for each operation in the **Trace operations** table (**amTraceOp**) and populate the following fields and links:

Field or link to populate	Value for record 1	Value for record 3
Label (Label)	Connect	Connect
Host trace history (HostTrace- Hist)	Hewlett Packard Procurve 10/100 Base T - 8 ports (EX- AMPLE006)	Corel FTP - Category 5 - 4 twis- ted pairs (EXAMPLE001)
User trace history (UserTrace- Hist)	Corel FTP - Category 5 - 4 twis- ted pairs (EXAMPLE001)	Hewlett Packard Procurve 10/100 Base T - 8 ports (EX- AMPLE005)

6 Connections - creation with the wizards

AssetCenter is provided with numerous cabling wizards that automate the creation of connections.

This chapter explains how they work.

💋 Note:

The cabling wizards do not populate the following tables unless you select a project and a work order at the end of the wizard's execution:

- Trace outputs (amTraceOutput)
- Trace histories (amTraceHistory)
- Trace operations (amTraceOp)

Run riser cables wizard

Functions performed by the wizard

This wizard connects two termination fields using a riser cable.

Prerequisites

You should have already created:

• The host termination field.

• The devices of the host termination field to which the riser cable will connect.

Warning:

You must respect different conditions according to the connection to the device and whether it is made by ports or by pins.

- ▶ Connection by ports or by pins [page 61]
- The user termination field.
- The devices of the user termination field to which the riser cable will connect.

🐓 Warning:

You must respect different conditions according to the connection to the device and whether it is made by ports or by pins.

- ▶ Connection by ports or by pins [page 61]
- The connection types you will use to connect the cable to the host and user devices.
- The label rules you will use to label the cable, the host links and the user links.
- The riser cable model to create.
- A project and a work order, if you want to store the trace of the connections carried out.

Use the Run riser cables wizard.

Launching the wizard

This wizard does not require any particular context:

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Run riser cables** wizard.

ጆ Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

Information used when using the wizard

• Warning:

Certain labels in the following table are not displayed by the wizard unless you select the appropriate option.

Table 6.1. Run riser cables wizard - description of fields to populate

Label displayed by the wizard	Explanations
Select a host termination field page	
Locations	Select the location of the host termination field that you want to connect to the riser cable.
Host termination field	Select the host termination field to connect to the riser cable.
Do you want to select the starting position?	 If you check this option, the wizard will display the list of positions of the termina- tion field with its roles and the termination- field device.
	 If you don't check this option, the wizard automatically searches for the first avail- able termination-field device having a port that is:
	 Available
	 Associated with a connection type that you will select on another page.
Termination-field devices	Select the termination-field device from which you will connect the riser cable.
Select the host termination field connect	ors and a label rule <i>page</i>
Cable connection types	Select the connection type enabling you to connect the riser cable to the termination field.
	The wizards use the connection type, which you choose, as part of their criteria to select a port in order to create a cable link.
	If the connection type is by pin and the wizard created a virtual port to create a cable link, the connection type selected is associated with this virtual port.
Select the label rule for the links	You use this label rule to populate the Label field (Label) of the link created at the level of the host-termination-field device.

Label displayed by the wizard	Explanations
Do you want to search (not create) for ports of this pin mode?	 If you check this option, the wizard only looks for ports: That already exist (the wizard does not create virtual ports). Associated with a connection type that you
	will select with the wizard.
Map consecutive pins to virtual port for pin- based devices (default is next available pin)?	 If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports. If you don't check this option, the wizard selects the first available pins without requiring them to have consecutive numbers.
Type of cable connection for odd pins	This part of the wizard handles pins that do not exist in numbers large enough to create a connection after having associated all the other pins to virtual ports.
	These pins can, however, be used in other ways. Indicate in this field what type of connection to use for the remaining pins.
Type of duty for odd pins connector	Select the duty assigned to the remaining pins.
Do you want to select the starting port?	Select this option if you want to specify from which number the wizard should associate a port to a bundle of the riser cable to create a link.
	This refers to a port of the termination-field device that was selected with the wizard on the previous page.
Starting port	This port specifies from which number the wizard can associate a port to a bundle of the riser cable to create a link.
	This refers to a port of the termination-field device that was selected with the wizard on the previous page.
Do you want to select the starting pin?	Select this option if you want to specify from which pin number the wizard can start using pins to create a virtual port.
	This port will be associated to a riser-cable bundle to create a link.
Starting pin	This pin determines from which pin number the wizard can start using pins to create a vir- tual port.
	This port will be associated to a riser-cable bundle to create a link.
Select a user termination field <i>page</i>	

Label displayed by the wizard	Explanations
Locations	Select the location of the user termination field
	to connect to the riser cable.
	Only the locations served by the host termina- tion field are listed.
User termination field	Select the user termination field to connect to the riser cable.
Do you want to select a starting position?	 If you check this option, the wizard will display the list of positions of the termina- tion field with its roles and the termination- field device.
	 If you don't check this option, the wizard automatically searches for the first avail- able termination-field device having a port that is:
	 Available Associated with a connection type that you will select on another page.
Termination-field devices	Select the termination-field device to which you will connect the riser cable.
Select the user termination field connected	
Cable connection types	Select the connection type enabling you to
	connect the riser cable to the termination field.
	The wizards use the connection type, which you choose, as part of their criteria to select a port in order to create a cable link.
	If the connection type is by pin and the wizard created a virtual port to create a cable link, the connection type selected is associated with this virtual port.
Select the label rule for the links	You use this label rule to populate the Label
	field (Label) of the link created at the level of the user-termination-field device.
Do you want to search (not create) for ports of this pin mode?	
	 That already exist (the wizard does not create virtual ports).
	 Associated with a connection type that you will select with the wizard.
Map consecutive pins to virtual port for pin- based devices (default is next available pin)?	 If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports.
	 If you don't check this option, the wizard selects the first available pins without re- quiring them to have consecutive numbers.

Label displayed by the wizard	Explanations
Type of cable connection for odd pins	This part of the wizard handles pins that do not exist in numbers large enough to create a connection after having associated all the other pins to virtual ports.
	These pins can, however, be used in other ways. Indicate in this field what type of connection to use for the remaining pins.
Type of duty for odd pins connector	Select the duty assigned to the remaining pins.
Do you want to select an starting port?	Select this option if you want to specify from which number the wizard should associate a port to a bundle of the riser cable to create a link.
	This refers to a port of the termination-field device that was selected with the wizard on the previous page.
Starting port	This port specifies from which number the wizard can associate a port to a bundle of the riser cable to create a link.
	This refers to a port of the termination-field device that was selected with the wizard on the previous page.
Do you want to select a starting pin?	Select this option if you want to specify from which pin number the wizard can start using pins to create a virtual port.
	This port will be associated to a riser-cable bundle to create a link.
Starting pin	This pin determines from which pin number the wizard can start using pins to create a vir- tual port.
	This port will be associated to a riser-cable bundle to create a link.
Select a riser cable page	
Cable role	The selected role is used to:
	 Populate the Role field (CableRole) of a cable created by the wizard
	 Select a device to connect
	 Filters the existing cables that the wizard displays.
Do you want to use an existing cable?	 If you check this option, the wizard asks you to select an existing cable.
	 If you do not check this option, the wizard asks you to select a riser-cable model in or- der to create the cable itself.
Number of pairs to be connected:	Define how many cable pairs must be connected to the termination fields by the wizard.

Label displayed by the wizard	Explanations
Do you want to select a starting pair?	 If you check this option, you can specify from which number the wizard can associ- ate an available pair to a bundle of the riser cable to create a link.
	 If you do not check this option, the wizard selects the first available pairs.
Starting pairs for the cable model	Select the starting pair.
Starting pairs for the cable	Select the starting pair.
Select label rule for riser page	
Do you want to use a label rule for the cable label?	 If you check this option, the wizard uses a label rule to populate the Label field (Label) of the cable.
	 If you check this option, you can directly enter the label using the wizard.
Select the label rule for the cable	You use this label rule to populate the Label field (Label) of the cable.
Duty of the new cable	 The selected duty is: Part of the criteria the wizards use to select ports to connect.
	 Associated to the ports and virtual bundles created by the wizard to create the links.
Number of pairs in a bundle	Indicates the number of pairs to associated to each virtual bundle created by the wizard.
	You must be able to divide the total number of pairs to be connected, which you defined in the previous page, by this number.
	The default value is calculated in the following manner:
	1 The wizard subtracts the connection type with the least numbers of pins (from the host and user connection types selected with the wizard).
	2 It then divides the number of pins of the connection type that was subtracted by the number of pairs/conductors of the pair/conductor type of the cable selected with the wizard.
Select the label rule for the links	You use this label rule to populate the Label field (Label) of the cable link created from the cable.
Select a project and a work order <i>page</i>	
Cable comments	Value for the Description field (Description) of the Cables concerned by the project table (amProjCable).

Label displayed by the wizard	Explanations
Connection comments	Value for the Description field (Description)
	of the Traces concerned by the project table
	(amProjTraceOut).
Connection termination field for the work or-	Value for the Label field (Label) of the Trace
der	operations table (amTraceOp).

Data created or modified by the wizard

The wizard creates, if appropriate, the following items:

- A cable (**amCable**)
- Pairs/conductors for this cable (amCablePair)
- Bundles (amCableBundle)
- Ports (amPort)
- Cable links (amCableLink)
- Trace histories (amTraceHistory)
- Trace outputs (amTraceOutput)
- Trace operations (amTraceOp)

The wizard populates the following fields:

Table 6.2. Run riser cables wizard - created or modified data

Field label	SQL name of the field	Explanations
Assets table (amAsset)		
Ports	Ports	The wizard creates virtual ports connected to bundles of the riser cable if it is necessary.
Ports table (amPort)		
Port #	PortNo	This field is only populated for the virtual ports created by the wizard.
		Its value is the number after the last port number existing for the device.
#	sSequenceNumber	This field is only populated for the virtual ports created by the wizard.
		Its value is the number after the last port number existing for the device.
Connection type	CabCnxType	This field is only populated for the virtual ports created by the wizard.
		Connection type selected using the wizard for the host or user termination field.
Function	Duty	This field is only populated for the virtual ports created by the wizard.
		Duty defined by the wizard for the cable.

Field label	SQL name of the field	Explanations
Status	seCnxStatus	This field is only populated for the virtual ports created by the wizard.
		Its value is set to Available by the wizard.
Virtual port	bVirtual	This field is only populated for the virtual ports created by the wizard.
		Its value is set to Yes .
Port pins/terminals	DevPin	Pins selected by the wizard to create a cable link.
Cables table (amCab	le)	
Model	Model	Cable model selected using the wizard.
Label rule	LabelRule	This field is only modified for the cables cre- ated by the wizard.
		The label rule selected using a wizard for the cable.
Label	Label	This field is only modified for the cables cre- ated by the wizard.
		The label is calculated according to the label
		rule.
User location	UserLoc	This field is only modified for the cables cre- ated by the wizard.
		Location of the user termination field selected using the wizard.
Host location	HostLoc	This field is only modified for the cables cre- ated by the wizard.
		Location of the host termination field selected using the wizard.
Role	CableRole	Role selected using the wizard.
Status	seCnxStatus	This field is only modified for the cables cre- ated by the wizard.
		Its value is set to Available by the wizard.
Pairs/Conductors	Pairs	This field is only modified for the cables cre- ated by the wizard.
		Pairs/conductors of the model.
Bundles	Bundles	Virtual bundles created by the wizard if it is necessary.
Pairs/Conductors ta	ble (amCablePair)	
Bundle	Bundle	Bundle with which the pair/conductor is asso- ciated to create a cable link.
Pins table (amDevicePin)		
Port	Port	Port with which the pin/terminal is associated to create a cable link.
Cable bundle table (amCableBundle)		

Field label	SQL name of the field	Explanations
#	sSequenceNumber	This field is only populated for the virtual bundles created by the wizard.
		Its value is the number after the last bundle number existing for the device.
Name	Name	This field is only populated for the virtual bundles created by the wizard.
		Its value is the number after the last bundle number existing for the device.
Function	Duty	This field is only populated for the virtual bundles created by the wizard.
		Duty defined by the wizard for the cable.
Status	seCnxStatus	This field is only populated for the virtual bundles created by the wizard.
		Its value is set to Available by the wizard.
Virtual bundle	bVirtual	This field is only populated for the virtual bundles created by the wizard.
		Its value is set to Yes .
Pairs/Conductors	Pair	Pairs/conductors selected by the wizard to
		create a cable link.
Cable links table (a	ımCableLink)	
Name	Name	Default value of the field.
Link type	seLinkType	Populated by the wizard according to whether
		the cable link concerns a cable device or a cable.
Parent link	Parent	
Label rule	LabelRule	The label rule selected using a wizard.
Label	Label	The label is calculated according to the label rule.
Function	Duty	Duty selected using the wizard.
Device	Device	Device selected automatically by the wizard or by you using the wizard.
Port	Port	Port selected or created by the wizard.
Cable	Cable	Cable created by the wizard or selected by you using the wizard.
Bundle	Bundle	Bundle selected or created using the wizard.
Trace histories tabl	le (amTraceHistory)	
Name	Name	Copy the value defined for the same field used at the level of the cable link.
Туре	seLinkType	Copy the value defined for the same field used at the level of the cable link.
Parent history	Parent	Copy the value defined for the same field used at the level of the cable link.
Label	Label	Copy the value defined for the same field used at the level of the cable link.
Device	Device	Copy the value defined for the same field used at the level of the cable link.

Field label	SQL name of the field	Explanations
Port	Port	Copy the value defined for the same field used
		at the level of the cable link.
Cable	Cable	Copy the value defined for the same field used
		at the level of the cable link.
Bundle	Bundle	Copy the value defined for the same field used
		at the level of the cable link.
Link	Link	Cable link created by the wizard.
Trace outputs table (amTraceOutput)		
Туре	seTraceType	Value set to To connect by the wizard.
Function	Duty	Duty selected using the wizard.
Label	ModifiedLinkLabel	The label is calculated by the wizard and is
		not based on a label rule in any way.
Summary of the trace	TraceString	Calculated by the wizard.
Trace history	TraceHist	Histories created by the wizard.
Trace operations	TraceOps	Operations created by the wizard.
Trace operations table (amTraceOp)		
Title	Label	Value defined by the wizard according to the
		comments that you entered using the wizard.
Host trace history	HostTraceHist	Defined by the wizard.
User trace history	UserTraceHist	Defined by the wizard.

Viewing the result

The easiest way to view the result of this wizard is to display the detail of the project selected on the last page of the wizard:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the project created by the wizard.
- 3 Select the **Cables** tab.

The **Cables** tab enables you to locate the cable that connects the two termination fields:

- 1 Select the cable to examine.
- 2 Click the magnifier to display an intermediary window.
- ³ In the intermediary window, click the magnifier to the right of the **Cable** field to view the detail of the device.
- 4 Right-click on any field (not link) in the **Assets** table (**amAsset**) to display the shortcut menu.
- 5 From the shortcut menu, select either the Actions/ Cable cross-connections or Actions/ Display cable traces menu entry to view and browse through the traces.

This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

4 Select the **Traces** tab.

The **Traces** tab displays the list of trace outputs created by the wizard.

After having launched the wizard

Run the riser cable at the level of your network, being sure to respect the indications listed in the project and the work order, and update the follow-up information of the project and work order.

Resolving possible problems

If the Select a host termination field page or Select a user termination field page does not display any termination field to select:

- 1 Click **Cancel** to interrupt the execution of the wizard.
- 2 Display the list of termination fields (**Cable/ Termination fields**).
- 3 Select the host termination field (the one that was not listed by the wizard).
- 4 Select the **Served locations** tab.
- 5 Add the location to the location of the user termination field to the list.
- 6 Click Modify.
- 7 Click Close.
- 8 Execute the **Run riser cables** wizard again.

Use the **Run riser cables** wizard for the practical case.

We are going to run a telephone riser cable between the floor's termination field and the main termination field.

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Run riser cables** wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

3 Enter the following information:

Label displayed by the wizard	Value to enter or select		
Select a host termination field <i>page</i>			
Locations	/Cabled building/2nd floor/Main wiring closet/		
Host termination field	Main wiring closet		
Do you want to select a starting position?	Do not check this option.		
Select the host termination field connectors and a label rule page			
Cable connection types	RJ45 - 568B - Pin		

Label displayed by the wizard	Value to enter or select
Select the label rule for the links	Practical case - Port of a termination-field patch
	panel link
Do you want to search (not create) ports of this pin mode?	Do not check this option.
Map consecutive pins to virtual port for pin-based devices (default is next available pin)?	Check this selection box.
Type of cable connection for odd pins	Do not change the information displayed by the wizard; it will not be used.
Type of duty for odd pins connector	Do not change the information displayed by the wizard; it will not be used.
Select a user termination field page	
Locations	Cabled building/1st floor/1st floor wiring closet
User termination field	Wiring closet for each floor
Do you want to select a starting position?	Do not check this option.
Select the user termination field connectors	
Cable connection types	RJ45 - 568B - Pin
Select the label rule for the links	Practical case - Port of a termination-field patch panel link
Do you want to search (not create) ports of this pin mode?	Do not check this option.
Map consecutive pins to virtual port for pin-based	Check this selection box.
devices (default is next available pin)?	
Type of cable connection for odd pins	Do not change the information displayed by the wizard; it will not be used.
Type of duty for odd pins connector	Do not change the information displayed by the wizard; it will not be used.
Select a riser cable <i>page</i>	,
Cable role	Riser
Do you want to use an existing cable?	Do not check this option.
Model of the cable to create	L 120 - Category 5 - 32 twisted pairs
Number of pairs to be connected:	32
Do you want to select a starting pair?	Do not check this option.
Select label rule for riser page	
Do you want to use a label rule for the cable label?	Check this selection box.
Select the label rule for the cable	Practical case - Cables
Duty for the new cable:	Voice
Number of pairs in a bundle	1
Select the label rule for the links	Practical case - Link - Sequentially, by pairs
Select a project and a work order <i>page</i>	
Apply all changes to a project/work order?	Check this selection box.
Projects	Run riser cables
Work orders	Select the work order proposed by the wizard.
Comments on the cable	Install the new cable
Connection comments	Riser run to connect devises

Look at the result:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the **Run riser cables** project.
- 3 Select the **Cables** tab.
- 4 Select the cable just created.
- 5 Click the magnifier to display an intermediary window.
- 6 In the intermediary window, click the magnifier to the right of the **Cable** field to view the detail of the device.
- 7 Have a look at the different tabs at your own pace.
- 8 Select any field (not link) in the **Cables** table (**amCable**).
- 9 Right-click.
- 10 From the shortcut menu, select either the Actions/ Cable
 - **cross-connections** or **Actions/ Display cable traces** menu entry to view and browse through the traces.

This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

Run lateral cables wizard

Functions performed by the wizard

This wizard connects wall outlets to a termination field using lateral cables. The wizard uses a group of topologies as its model.

Prerequisites

You should have already created:

- The location of the wall outlets.
- The group of topologies to use as the model.
- The topologies that compose the topology group.
- The termination fields that serve the locations of the wall outlets.
- The devices of the termination field to which the lateral cable will connect.

! Warning:

You must respect different conditions according to the connection to the device and whether it is made by ports or by pins.

- Connection by ports or by pins [page 61]
- A project and a work order, if you want to store the trace of the connections carried out.

Use the **Run lateral cables** wizard.

Launching the wizard

This wizard does not require any particular context.

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Run lateral cables** wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

😯 Tip:

If you display the list of locations (**Portfolio/ Locations** menu item) and select all the locations of the wall outlets before executing the wizard, the wizard will not ask to you perform this selection again.

Information used when using the wizard

💋 Note:

Certain labels in the following table are not displayed by the wizard unless you select the appropriate option.

Table 6.3. Run lateral cables wizard - description of fields to populate

Label displayed by the wizard	Explanations
Select user locations page	
Locations	Select one location per wall outlet to connect.

Label displayed by the wizard	Explanations
Select the topology group <i>page</i>	· ·
Topology groups	Select the group of topologies that will be used as the connection model of the wall outlets to the termination field that serves them.
Are there any topologies in which you want to look for ports with pin-based connectors?	Check this option if you want the wizard to look for virtual ports that have already been created on the host or the user side of the topo- logy. This option's only result is that it displays two other options that will have an effect on how
	the wizard works.
Do you want to look for ports on the host side of the topology?	If you check this option, the wizard looks for virtual ports that exist at the level of the ter- mination fields in order to create the connec- tion with the lateral cable.
	This is valid for the topologies selected from the following list.
Do you want to look for ports on the user side of the topology?	If you check this option, the wizard looks for virtual ports that exist at the level of the wall outlets in order to create the connection with the lateral cable.
	This is valid for the topologies selected from the following list.
Topology in a group	Select the topologies to which apply the options previously checked.
Map consecutive pins to virtual port for pin- based devices (default is next available pin)?	 If you check this option, the wizard only uses the pins with consecutive numbers to create virtual ports.
	 If you don't check this option, the wizard selects the first available pins without re- quiring them to have consecutive numbers.
Select a project and a work order page	
Comments on the devices	Value for the Description field (Description) of the Assets included in projects table (amAstProjDesc).
Cable comments	Value for the Description field (Description) of the Cables concerned by the project table (amProjCable).
Connection comments	Value for the Description field (Description) of the Traces concerned by the project table (amProjTraceOut).
Connection termination field for the work order	Value for the Label field (Label) of the Trace operations table (amTraceOp).

Data created or modified by the wizard

The wizard creates, if appropriate, the following items:

- Cables (amCable)
- Pairs/conductors for the cables (amCablePair)
- Bundles (amCableBundle)
- Cable devices (amAsset)
- Pins for the devices (amDevicePin).
- Ports for the devices (amPort)
- Cable links (amCableLink)
- Trace histories (amTraceHistory)
- Trace outputs (amTraceOutput)
- Trace operations (**amTraceOp**)

The wizard populates the following fields:

Table 6.4. Run lateral cables wizard - created or modified data

Field label	SQL name of the field	Explanations
Assets table (amAsse	et)	
Ports	Ports	The wizard creates virtual ports connected to bundles of the lateral cable if it is necessary.
Location	Location	The wizard links wall outlets to the location selected using the wizard, if it creates wall outlets.
Ports table (amPort)		
Port #	PortNo	This field is only populated for the virtual ports created by the wizard.
		Its value is the number after the last port number existing for the device.
#	sSequenceNumber	This field is only populated for the virtual ports created by the wizard.
		Its value is the number after the last port number existing for the device.
Connection type	CabCnxType	This field is only populated for the virtual ports created by the wizard.
		Its value corresponds to the connection type defined at the level of the topology step for the device to which the port belongs.

Field label	SQL name of the field	Explanations
Function	Duty	This field is only populated for the virtual ports created by the wizard.
		Its value corresponds to the duty defined at the level of the topology for the device to which the port belongs.
Status	seCnxStatus	This field is only populated for the virtual ports created by the wizard.
		Its value is set to Available by the wizard.
Virtual port	bVirtual	This field is only populated for the virtual ports created by the wizard.
		Its value is set to Yes .
Port pins/terminals	DevPin	Pins selected by the wizard to create a cable link, if the connection is by pin.
Cables table (amCak		
Model	Model	This field is only modified for the cables cre- ated by the wizard.
		Cable model defined at the level of the topology step.
Label rule	LabelRule	Default value of the field.
Label	Label	This field is only modified for the cables cre- ated by the wizard.
		The label is calculated according to the label rule.
User location	UserLoc	This field is only modified for the cables cre- ated by the wizard.
		Location of the wall outlet.
Host location	HostLoc	This field is only modified for the cables cre- ated by the wizard.
		Location of the termination field found by the wizard to create the connection.
Role	CableRole	This field is only modified for the cables cre- ated by the wizard.
		Role defined at the level of the topology step.
Status	seCnxStatus	This field is only modified for the cables cre- ated by the wizard.
		Its value is set to Available by the wizard.
Pairs/Conductors	Pairs	This field is only populated for the cables cre- ated by the wizard.
		Pairs/conductors of the model.
Bundles	Bundles	Virtual bundles created by the wizard if it is necessary.
Pairs/Conductors ta		
Bundle	Bundle	Bundle with which the pair/conductor is asso- ciated to create a cable link.

Field label	SQL name of the field	Explanations
Pins table (amDevie	cePin)	
Port	Port	Port with which the pin/terminal is associated to create a cable link.
Cable bundle table	(amCableBundle)	
#	sSequenceNumber	This field is only populated for the virtual bundles created by the wizard.
		Its value is the number after the last bundle number existing for the device.
Name	Name	This field is only populated for the virtual bundles created by the wizard.
		Its value is the number after the last bundle number existing for the device.
Function	Duty	This field is only populated for the virtual bundles created by the wizard.
		Duty defined at the level of the topology.
Status	seCnxStatus	This field is only populated for the virtual bundles created by the wizard.
		Its value is set to Available by the wizard.
Virtual bundle	bVirtual	This field is only populated for the virtual bundles created by the wizard.
		Its value is set to Yes .
Pairs/Conductors	Pair	Pairs/conductors selected by the wizard to create a cable link.
Cable links table (a	ımCableLink)	
Name	Name	Default value of the field.
Link type	seLinkType	Populated by the wizard according to whether the cable link concerns a cable device or a cable.
Parent link	Parent	
Label rule	LabelRule	The label rule selected at the level of the topology.
Label	Label	The label is calculated according to the label rule.
Function	Duty	Duty defined at the level of the topology.
Device	Device	Device selected or created using the wizard.
Port	Port	Port selected or created by the wizard.
Cable	Cable	Cable selected or created by the wizard.
Bundle	Bundle	Bundle selected or created using the wizard.
Trace histories tabl	le (amTraceHistory)	
Name	Name	Copy the value defined for the same field used at the level of the cable link.
Туре	seLinkType	Copy the value defined for the same field used at the level of the cable link.
Parent history	Parent	Copy the value defined for the same field used at the level of the cable link.

Field label	SQL name of the field	Explanations
Label	Label	Copy the value defined for the same field used
		at the level of the cable link.
Device	Device	Copy the value defined for the same field used
		at the level of the cable link.
Port	Port	Copy the value defined for the same field used
		at the level of the cable link.
Cable	Cable	Copy the value defined for the same field used
		at the level of the cable link.
Bundle	Bundle	Copy the value defined for the same field used
		at the level of the cable link.
Link	Link	Cable link created by the wizard.
Trace outputs table (amTraceOutput)	
Туре	seTraceType	Value defined using the wizard.
Function	Duty	Duty defined at the level of the topology.
Label	ModifiedLinkLabel	The label is calculated by the wizard and is
		not based on a label rule in any way.
Summary of the trace	TraceString	Calculated by the wizard.
Trace histories	TraceHist	Histories created by the wizard.
Trace operations	TraceOps	Operations created by the wizard.
Trace operations table (amTraceOp)		
Title	Label	Value defined by the wizard according to the
		comments that you entered using the wizard.
Host trace history	HostTraceHist	Defined by the wizard.
User trace history	UserTraceHist	Defined by the wizard.

Viewing the result

The easiest way to view the result of this wizard is to display the detail of the project selected on the last page of the wizard:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the project created by the wizard.
- 3 Select the **Cables** tab.

The **Cables** tab enables you to locate the cable that connects the two termination fields:

- 1 Select the cable to examine.
- 2 Click the magnifier to display an intermediary window.
- ³ In the intermediary window, click the magnifier to the right of the **Cable** field to view the detail of the device.
- 4 Right-click on any field (not link) in the **Assets** table (**amAsset**) to display the shortcut menu.
- 5 From the shortcut menu, select either the Actions/ Cable cross-connections or Actions/ Display cable traces menu entry to view and browse through the traces.

This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

4 Select the **Assets** tab.

The **Assets** tab enables you to locate the devices created by the wizard (not those that already existed):

- 1 Select the device to examine.
- 2 Click the magnifier to display an intermediary window.
- 3 In the intermediary window, click on the magnifier to the right of the **Asset** field to view the detail of the device.
- 4 Right-click on any field (not link) in the **Assets** table (**amAsset**) to display the shortcut menu.
- 5 From the shortcut menu, select either the **Actions/ Cable**

cross-connections or **Actions/ Display cable traces** menu entry to view and browse through the traces.

This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

5 Select the **Traces** tab.

The **Traces** tab displays the list of trace outputs created by the wizard.

After having launched the wizard

Run the lateral cable and install the cable devices as you need them, being sure to respect the indications listed in the project and the work order, and update the follow-up information of the project and work order.

Use the **Run lateral cables** wizard for the practical case.

We are going to run a lateral cable between the wall outlet of Office 1 and the floor's termination field.

- 1 Display the list of actions (**Tools/ Actions**).
- 2 Select the **Run riser cables** wizard.

💋 Note:

If this wizard does not appear in the list, select *Others*... at the end of the list.

3 Enter the following information:

Label displayed by the wizard	Explanations
Select user locations page	

Label displayed by the wizard	Explanations
Locations	Cabled building/1st floor/Office 1
Select the topology group page	
Topology groups	Standard workstation
Are there any topologies in which you want to	Do not check this option.
look for ports with pin-based connectors?	
Map consecutive pins to virtual port for pin-based	Do not check this option.
devices (default is next available pin)?	
Select a project and a work order <i>page</i>	
Select a project and a work order <i>page</i> Apply all changes to a project/work order?	Check this selection box.
	Check this selection box. Run lateral cables
Apply all changes to a project/work order?	
Apply all changes to a project/work order? Projects	Run lateral cables
Apply all changes to a project/work order? Projects Work orders	Run lateral cables Select the work order proposed by the wizard.
Apply all changes to a project/work order? Projects Work orders Comments on the devices	Run lateral cables Select the work order proposed by the wizard. Install the device.

Look at the result:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the **Run lateral cables** project.
- 3 Select the **Cables** tab.
- 4 Select one of the cables just created.
- 5 Click the magnifier to display an intermediary window.
- 6 In the intermediary window, click the magnifier to the right of the **Cable** field to view the detail of the device.
- 7 Have a look at the different tabs at your own pace.
- 8 Select any field (not link) in the **Cables** table (**amCable**).
- 9 Right-click.
- 10 From the shortcut menu, select either the **Actions/ Cable**

cross-connections or **Actions/ Display cable traces** menu entry to view and browse through the traces.

This particularly enables you to access the termination-field devices that were connected to the cable by a wizard.

Cross connect bundles wizard

Functions performed by the wizard

This wizard connects bundles of the same cable to one of the following components:

Bundles of one or more cables.

- Ports of one or more cable devices.
- Ports of termination-field devices.

If the selected bundles or ports are already connected, the wizard begins by breaking the existing cable links before creating new ones.

Prerequisites

You should have already created:

- The source cable to connect, with its bundles, its user location and its host location.
- The cable device to which the cable connects, with its ports and its location. Otherwise, the cable to which the cable connects with its bundles, its user location and its host location.
- The termination fields that serve the user or host location of the cable to connect.
- A project and a work order, if you want to store the trace of the connections carried out.

Warning:

The wizard does not know how to create a virtual port.

Use the Cross connect bundles wizard.

Launching the wizard

To access this wizard, you must select a record or a field (not a link) from the **Cable bundles** table (**amCableBundle**):

To position yourself in the appropriate context:

- 1 Display the list of cables (**Cable/ Cables**).
- 2 Display the cable to connect.
- 3 Select the **Bundles** tab.
- 4 Select the bundles to cross connect.
- 5 Display the list of actions (**Tools/ Actions**).
- 6 Select the **Cross connect bundles** action.

Information used when using the wizard

ጆ Note:

Certain labels in the following table are not displayed by the wizard unless you select the appropriate option.

Table 6.5. Cross connect bundles wizard - description of fields to populate

Label displayed by the wizard	Explanations
Cross connect the bundles page	
Display available host bundles	 If you check this option, the wizard only displays the cable bundles whose host side is not used by any cable link. If you check this option, the wizard dis-
	plays all the cable's bundles.
	If you select a bundle whose host side is used by a cable link, the wizard will break the exist- ing cable link before creating a new one.
Display available user bundles	 If you check this option, the wizard only displays the cable bundles whose user side is not used by any cable link.
	 If you check this option, the wizard dis- plays all the cable's bundles.
	If you select a bundle whose user side is used by a cable link, the wizard will break the exist- ing cable link before creating a new one.
Select the bundles to connect	Select the cable bundles to connect.
Select label rule for the link of the selected	You use this label rule to populate the Label
bundle(s)	field (Label) of the links created at the level of the cable bundles.
Select connection side	Indicate which side of the cable you want to connect.
Connect to	Indicate to which component you want to con- nect the selected bundles:
	 Ports: to the ports of one or more cable devices.
	 Bundles: to the bundles of one or more cables.
	 Termination fields: to the ports of the ter- mination-field devices that serve the loca- tion of the cable.
Select a device and ports page	

Label displayed by the wizard	Explanations
Select a device	Select the cable devices to which you want to
	connect the bundles of the source cable.
Show available host ports	 If you check this option, the wizard only displays the ports of the device that are not used as hosts by any cable link.
	 If you check this option, the wizard dis- plays all the device's ports.
	If you select a port that is already used as a host, the wizard will break the existing cable link before creating a new one.
Show available user ports	 If you check this option, the wizard only displays the ports of the device that are not used as users by any cable link.
	 If you check this option, the wizard dis- plays all the device's ports.
	If you select a port that is already used as a user, the wizard will break the existing cable link before creating a new one.
Select the target ports	You must select as many ports as you have selected bundles for the cable in the previous window.
Select label rule for the link of the selected	You use this label rule to populate the Label
port(s)	field (Label) of the links created at the level of the port device.
Select a cable and bundles page	
Cables	Select the cable to which you want to connect the bundles of the source cable.
Display available host bundles	 If you check this option, the wizard only displays the cable bundles whose host side is not used by any cable link.
	 If you check this option, the wizard dis- plays all the cable's bundles.
	If you select a bundle whose host side is used by a cable link, the wizard will break the exist- ing cable link before creating a new one.
Display available user bundles	 If you check this option, the wizard only displays the cable bundles whose user side is not used by any cable link.
	 If you check this option, the wizard dis- plays all the cable's bundles.
	If you select a bundle whose user side is used by a cable link, the wizard will break the exist- ing cable link before creating a new one.
Select label rule for destination bundle	You use this label rule to populate the Label field (Label) of the links created at the level of the target cable bundles.

Label displayed by the wizard	Explanations
Select a termination field and ports page	
Termination fields	Select the termination fields to which you want to connect the bundles of the source cable.
Show available host ports	If you check this option, the wizard only displays the ports of the termination-field devices that are not used as hosts by any cable link.
	 If you check this option, the wizard dis- plays all the ports.
	If you select a port that is already used as a host, the wizard will break the existing cable link before creating a new one.
Show available user ports	If you check this option, the wizard only displays the ports of the termination-field devices that are not used as users by any cable link.
	 If you check this option, the wizard dis- plays all the device's ports.
	If you select a port that is already used as a user, the wizard will break the existing cable link before creating a new one.
Select the target ports	You must select as many ports as you have selected bundles for the cable in the previous window.
Select label rule for the link of the selected port(s)	You use this label rule to populate the Label field (Label) of the links created at the level of the termination-field port devices.
Select a project and a work order <i>page</i>	
Connection comments	Value for the Description field (Description) of the Traces concerned by the project table (amProjTraceOut), when the wizard creates a connection.
Disconnection comments	Value for the Description field (Description) of the Traces concerned by the project table (amProjTraceOut), when the wizard deletes a connection.
Comments on the termination field connected during work order	Value for the Label field (Label) of the Trace operations table (amTraceOp), when the wizard creates a connection.
Comments on the termination field disconnec- ted during work order	Value for the Label field (Label) of the Trace operations table (amTraceOp), when the wizard deletes a connection.

Data created or modified by the wizard

To create a connection, the wizard creates the following items:

- Cable links (amCableLink)
- Trace histories (amTraceHistory)
- Trace outputs (amTraceOutput)
- Trace operations (**amTraceOp**)

To delete a connection, the wizard performs the following tasks:

- Deletes the cable links (amCableLink).
- Creates trace outputs (amTraceOutput).
- Creates trace operations (amTraceOp).

The wizard populates the following fields:

Table 6.6. Cross connect bundles wizard - created or modified data

Field label	SQL name of the field	Explanations	
Cable links table	(amCableLink)		
Name	Name	Default value of the field.	
Link type	seLinkType	Populated by the wizard according to whether the cable link concerns a cable device or a cable.	
Parent link	Parent		
Label rule	LabelRule	The label rule selected using a wizard.	
		If no label rule has been selected, this is the default value of the field.	
Label	Label	The label is calculated according to the label rule.	
Function	Duty	Duty of the port or bundle connected by the wizard.	
Device	Device	Device selected using the wizard.	
Port	Port		
		Port selected using the wizard.	
Cable	Cable	Cable selected using the wizard.	
Bundle	Bundle	Bundle selected using the wizard.	
Trace histories ta	ble (amTraceHistory)		
Name	Name	Default value of the field.	
Туре	seLinkType	Copy the value defined for the same field used	
		at the level of the cable link.	
Parent history	Parent	Copy the value defined for the same field used	
·		at the level of the cable link.	
Label	Label	Copy the value defined for the same field used	
		at the level of the cable link.	
Device	Device	Copy the value defined for the same field used	
		at the level of the cable link.	

Field label	SQL name of the field	Explanations	
Port	Port	Copy the value defined for the same field used	
		at the level of the cable link.	
Cable	Cable	Copy the value defined for the same field used	
		at the level of the cable link.	
Bundle	Bundle	Copy the value defined for the same field used	
		at the level of the cable link.	
Link	Link	 If the wizard creates a connection: It is the cable link created by the wizard. 	
		 If the wizard deletes a connection: It is empty. 	
Trace outputs table (amTraceOutput)		
Туре	seTraceType	To connect : if it's a connection.	
		To disconnect : if it's a disconnection.	
Function	Duty	Duty of the port or the bundle connected by	
		the wizard.	
Label	ModifiedLinkLabel	The label is calculated by the wizard and is	
		not based on a label rule in any way.	
Summary of the trace	TraceString	Calculated by the wizard.	
Trace history	TraceHist	 If the wizard creates a connection: They are the histories created by the wizard. 	
		If the wizard deletes a connection: They	
		are the histories that exist for the deleted	
		cable links.	
Trace operations	TraceOps	Operations created by the wizard.	
Trace operations (ar	nTraceOp)		
Title	Label	Value defined by the wizard according to the	
		comments that you entered using the wizard.	
Host trace history	HostTraceHist	Defined by the wizard.	
User trace history	UserTraceHist	Defined by the wizard.	

Viewing the result

The easiest way to view the result of this wizard is to display the detail of the project selected on the last page of the wizard.

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the project created by the wizard.
- 3 Select the **Traces** tab.

The **Traces** tab displays the list of trace outputs created by the wizard.

- 1 Select the trace output to examine.
- 2 Click the magnifier to display an intermediary window.
- 3 In the intermediary window, click on the magnifier to the right of the **Trace output** field.
- 4 Examine the trace output information.

You can also display the cross connections screen or the cable trace outputs screen:

- 1 Display the list of cables (**Cable/ Cables**).
- 2 Select the cable that you just connected from the list of cables.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the Cable cross-connections or Display cable traces action.

After having launched the wizard

Perform the physical cross connections, being sure to respect the indications listed in the project and the work order, and update the follow-up information of the project and work order.

Use the Cross connect bundles wizard for the practical case.

We are going to perform a modification at the level of the lateral cable that links the telephone outlet from Office 1 to the floor's termination field: We will connect the cable to another termination-field port.

Proceed in the following manner:

- 1 Display the list of locations (**Portfolio/ Locations**).
- 2 Select the **Cabled building/1st floor/Office 1** location.
- 3 Select the **Cable users** tab.
- 4 Select the cable that connects the telephone to the termination field (this bundle's duty is **Voice**).
- 5 Click the **Magnifier** button.
- 6 Select the **Bundles** tab.
- 7 Select the bundle from the list.
- 8 Display the list of actions (**Tools/ Actions**).
- 9 Select the **Cross connect bundles** action.
- 10 Enter the following information:

Label displayed by the wizard	Value	
Cross connect the bundles page		
Select connection side	Host side	
Display available host bundles	Unselect this option.	
Select the bundles to connect	Select the bundle.	
Select label rule for the link of the selected	Practical case - Link - Sequentially, by pairs	
bundle(s)		
Connect to	Termination fields	
Select a termination field and ports page		
Termination fields	Floor's termination field	

Label displayed by the wizard	Value
Show available host ports	Check this selection box.
Select the target ports	Select a port whose function is Voice .
Select label rule for the link of the selected $\ensuremath{port}(s)$	Practical case - Port of a termination-field patch panel link
Select a project and a work order <i>page</i>	
Apply all changes to a project/work order?	Check this selection box.
Projects	Cross connect bundles
Work orders	Select the work order proposed by the wizard.
Connection comments	Connect cables
Disconnection comments	Disconnect cables
Comments on the termination field connected	CONNECT
during work order	
Comments on the termination field disconnected	DISCONNECT
during work order	

Look at the result:

- 1 Display the list of projects (**Portfolio/ Projects**).
- 2 Select the **Cross-connect bundles** project.
- 3 Select the **Traces** tab.
- 4 Select the trace.
- 5 Click the **Magnifier** button.
- 6 Click the **Magnifier** button to the right of the **Trace** field.
- 7 Examine the detail of the trace output.

7 Viewing the traces

There are several ways to view a trace:

- Connection point by connection point, using the **Trace** tabs of the following tables:
 - Cables (amCable)
 - Assets (amAsset)
 - Ports (amPort)
 - Cable bundles (amCableBundle)
- In a more general manner, using the windows displayed by the following shortcut menus:
 - Actions/ Cable cross-connections
 - Actions/ Device cross-connections
 - Actions/ Display device traces
 - Actions/ Display cable traces

This chapter explains how to view the traces in a general manner.

Cable cross-connections wizard

Definitions

▶ AssetCenter key terms (Cable and Circuit) [page 173]/ Cross connection [page 182]

Functions performed by the wizard

The **Cable cross-connections** wizard displays a window that enables you to perform the following tasks:

- View the host and user links of the cable.
- Navigate through the traces, which are made up of cable links (either in the host direction or the user direction).

This enables you, for example, to answer the following questions:

- Which links are for this cable?
- Which bundles are used by links?
- To which wall outlet port is such cable bundle connected?
- To which termination field port is such a cable bundle connected?

Prerequisites

No prerequisites.

Use the Cable cross-connections wizard.

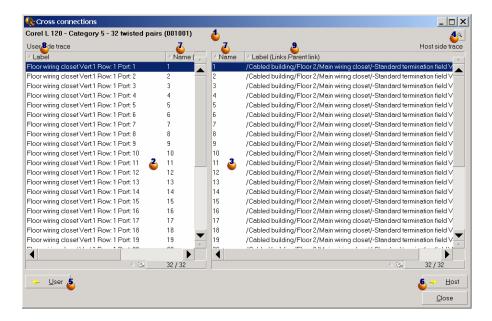
Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Cables** table (**amCable**):

- 1 Display the list of cables (**Cable/ Cables**).
- 2 Select the cable in the list window, or select a field (not link) in the **Cables** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Cable cross-connections** wizard.

Information used when using the wizard

Figure 7.1. **Cable cross-connections** wizard - browser window



[♦] Cable or device whose [♦] and [♦] tables display the cable links.

User cable links and devices that connect to the cable or the device 4.

 ${igstarrow}$ Host cable links and devices that connect to the cable or the device ${igstarrow}$.

ullet Click the magnifier to display the detail of the cable or the device ullet .

 \bullet Click this arrow to display the browser window for the user cable or device that corresponds to the selected link \bullet .

Click this arrow to display the browser window for the host cable or device that corresponds to the selected link ³.

Cable bundle numbers 4 (if 4 is a cable) or device ports 4 (if 4 is a device).

- ullet Label of the user link that connects to the bundle or the port ullet .
- ${}^{\textcircled{b}}$ Label of the host link that connects to the bundle or the port ${}^{\textcircled{b}}$.

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

Device cross-connections wizard

Definitions

▶ Cross connection [page 182]

Functions performed by the wizard

The **Device cross-connections** wizard displays a window to help you perform the following tasks:

 View the host and user links of the device to which the device links belong (in the host or user direction)

This enables you, for example, to answer the following questions:

- Which links are for this device?
- Which ports are used by links?
- To which cable bundle is such a device port connected?

Prerequisites

No prerequisites.

Use the **Device cross-connections** wizard.

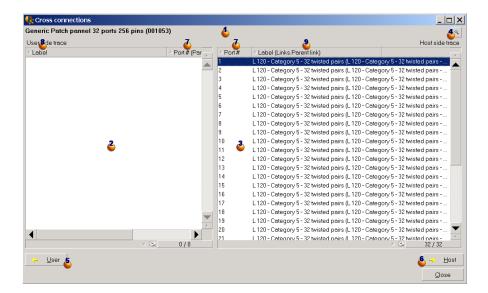
Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Assets** table (**amAsset**):

- 1 Display the list of cable devices (**Cable / Cable devices**).
- 2 Select the cable device in the list window, or select a field (not link) in the **Assets** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Device cross-connections** wizard.

Information used when using the wizard

Figure 7.2. **Device cross-connections** wizard - browser window



[♦] Cable or device whose [♦] and [♦] tables display the cable links.

 \clubsuit User cable links and devices that connect to the cable or the device \clubsuit .

 ${}^{\textcircled{\bullet}}$ Host cable links and devices that connect to the cable or the device ${}^{\textcircled{\bullet}}$.

ullet Click this magnifier to display the detail of the cable or the device ullet.

 \bullet Click this arrow to display the browser window for the user cable or device that corresponds to the selected link \bullet .

⁶ Click this arrow to display the browser window for the host cable or device that corresponds to the selected link ³.

 ${}^{\clubsuit}$ Label of the user link that connects to the bundle or the port ${}^{\clubsuit}$.

 \clubsuit Label of the host link that connects to the bundle or the port \clubsuit .

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

Display device traces wizard

Definitions

▶ Trace [page 174]

Functions performed by the wizard

The **Display device traces** wizard displays a window to help you perform the following tasks:

- View the host and user traces of the device.
- Print the list of traces.

Prerequisites

No prerequisites.

Use the **Display device traces** wizard.

Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the **Assets** table (**amAsset**):

- $1 \quad \text{Display the list of cable devices (Cable/ Cable devices).}$
- 2 Select the cable device in the list window, or select a field (not link) in the **Assets** table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Display device traces** wizard.

Information used when using the wizard

Figure 7.3. **Display device traces** wizard - browser window

Assets		+	Delete
lewlett Packard Procurve 10/100 Base T	- 8 ports (001052)	▲	
eneric Patch pannel 32 ports 256 pins (01	01053)		ī
eneric Patch pannel 32 ports 256 pins (01	01054)		
neric Patch panel 24 ports pre-loaded ((001055)		
ieneric Patch panel 24 ports pre-loaded (001056)	•	•
eneric Patch panel 24 ports pre-loaded (001057)	÷	
5, 3	4	A 🗠 😒 26 / 26	
Source	Host side cable trace	Host side device trace	Print
Floor wiring closet Vert 1 Row: 1 Port: 1	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar.	Preview
Floor wiring closet Vert1 Row: 1 Port 2	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego.	/Cabled building/Floor 2/Main wiring closet/-Standar.	5 Preview
Floor wiring closet Vert1 Row: 1 Port 3	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar.	Configure
Floor wiring closet Vert1 Row: 1 Port 4	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar.	Page setu
oor wiring closet Vert1 Row: 1 Port 5	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar.	i ago seta
Floor wiring closet Vert1 Row: 1 Port 6	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar.	
Floor wiring closet Vert1 Row: 1 Port 7	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar.	
Floor wiring closet Vert1 Row: 1 Port 8	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar.	
Floor wiring closet Vert1 Row: 1 Port 9	L 120 - Category 5 - 32 twisted pairs (L 120 - Catego	/Cabled building/Floor 2/Main wiring closet/-Standar 🗨	
	1		

Select the device to examine.

This table contains one row per trace that is directly attached to the device
as well as one line per free port (in other words, one that is not used by any link).

The **Source** column displays the labels of the links that are directly attached to the device 4, as well as a label for the free ports.

- The blue labels designate the ports used by at least one link.
- The red labels designate the ports that are not used by any links.

The **xxx Host side trace** columns are located to the right of the **Source** column. They display the labels of the traces in the host direction.

⁵ The **xxx User side trace** columns are located to the left of the **Source** column. They display the labels of the traces in the user direction.

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

Display cable traces wizard

Definitions

▶ Trace [page 174]

Functions performed by the wizard

The **Display cable traces** wizard displays a window to help you perform the following tasks:

- View the host and user traces of the cable.
- Print the list of traces.

Prerequisites

No prerequisites.

Use the **Display cable traces** wizard.

Launching the wizard

To access this wizard, you need to select a record or a field (not a link) in the Cables table (amCable):

- $1 \quad \text{Display the list of cables (Cable/ Cables).}$
- 2 $\,$ Select the cable in the list window, or select a field (not link) in the Cables table.
- 3 Display the list of actions (**Tools/ Actions**).
- 4 Select the **Display cable traces** wizard.

Information used when using the wizard

Figure 7.4. **Display cable traces** wizard - browser window

Cables orel L 120 - Category 5 - 32 twisted pairs (00	1001)		Delete
1			
		•	
5	3		
Jser side device trace	Source	Host side device trace	
Floor wiring closet Vert:1 Row: 1 Port: 1	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 2	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 3	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 4	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 5	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 6	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 7	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 8	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc	
Floor wiring closet Vert:1 Row: 1 Port: 9	L 120 - Category 5 - 32 twisted pairs (L 120 - Category	/Cabled building/Floor 2/Main wiring closet/-Stanc 😈	

b Select the cable to examine.

⁴ This table contains one row per trace that is directly attached to the cable

(in other words, one that is not used by any links).

 $\overset{\bullet}{\rightarrow}$ The **Source** column displays the labels of the links that are directly attached to the cable $\overset{\bullet}{\rightarrow}$, as well as a label for the free bundles.

- The blue labels designate the labels of the bundles used by at least one link.
- The red labels designate the labels of the bunles that are not used by any links.

The **xxx Host side trace** columns are located to the right of the **Source** column. They display the labels of the traces in the host direction.

• The **xxx User side trace** columns are located to the left of the **Source** column. They display the labels of the traces in the user direction.

Data created or modified by the wizard

This wizard does not create, delete or modify any data.

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8 Glossary (Cable and Circuit)

AssetCenter key terms (Cable and Circuit)

Pin/ Terminal

Component of a cable device port that creates an electronic connection (pin) or optical connection (terminal) with a connector pin/terminal or a cable wire.

The cable-device pins/terminals are associated with a port. The ports, themselves, can be associated with a bundle of cable pairs/conductors to create a cable link.

At the level of the connection types, the pins/terminals are associated with a color code entry.

Opposites

Pin is one of the two connection modes whose opposite is Port [page 183].

Table in the AssetCenter database that describes these objects

Pins (amDevicePin)

Cable

A cable is composed of one of the following sets of components:

- A set of wire pairs, if it conducts electrically.
- A set of conductors, if it conducts optically.

The pairs or conductors are grouped into bundles in order to create a connection with a cable device.

The cables connect the cable devices together.

Opposites

▶ Cable device [page 177]

Table in the AssetCenter database that describes these objects Cables (amCable)

Figure 8.1. Cable with its pairs and its wires - photo



Trace

Succession of links (in the logical sense) between cables and cable devices.

Opposites

This is opposite to Cabling path [page 191], which describes the cabling in a physical sense.

Color code

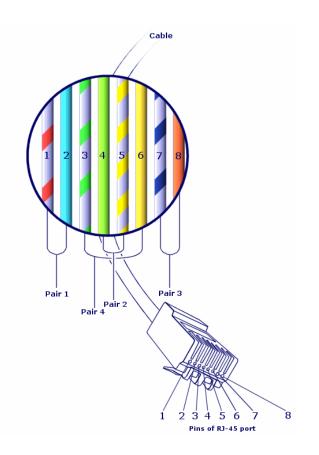
We use color codes in order find and distinguish between:

- A wire pair
- And a connector pin

Each wire and each pin are associated with a color code entry which identifies the wire.

When you create pairs using the **Create pairs** wizard, the wizard automatically assigns a color code entry to each created pair according to the pair's **Sequential number** field.

Figure 8.2. Color code - relation between cable wires, connector pins and colors.



If we take the RJ-45 connector, each pin is associated with a wire having a given color and a given duty:

Table 8.1. Color codes - description for an RJ-45 connector

Pin num- ber	Color of the associated pair.	Colors of the tip wire	Colors of the ring wire	Function
1	orange	white/blue	orange	Data transmis- sion +

Pin num- ber	Color of the associated pair.	Colors of the tip wire	Colors of the ring wire	Function
2	orange	white/orange	orange	Data transmis- sion -
3	green	white/green	green	Data re- ception +
4	blue	white/blue	blue	Voice transmis- sion +
5	blue	white/blue	blue	Voice transmis- sion -
6	green	white/green	green	Data re- ception -
7	brown	white/brown	brown	Voice re- ception +
8	brown	white/brown	brown	Voice re- ception -

Table in the AssetCenter database that describes these objects Color codes (amColorCode)

Column

Vertical axis of a termination field.

Opposites

▶ Line [page 182]

Trace output

Description of a trace.

Table in the AssetCenter database that describes these objects

Trace outputs (amTraceOutput)

Termination-field configuration

Defines the typical organization of a termination field type. Specifically:

- The duty assigned to each row or column of the termination field.
- The role assigned to each row or column of the termination field (and as a consequence, the roles of the cable devices that are there).

The termination-field configuration is used by the cabling wizards to automate the creation of termination fields (with their devices).

Examples

A termination field with 2 columns and 6 row will have 12 duties (voice or data, for example) and 6 roles (riser or lateral, for example).

Table in the AssetCenter database that describes these objects

Termination field configurations (amTermFldConfig)

Cable device

The cable devices corresponding to the network components that are not cables. The cable devices that connect to the cables and cable devices using:

- Pins, if it conducts electrically.
- Terminals, if it conducts optically.

The pins or connectors are grouped into ports in order to create a connection with the cable bundle or the port of another cable device.

Examples

- Controller card
- Wall outlets
- Patch panels
- Switches
- Hubs

Synonyms

Cable equipment

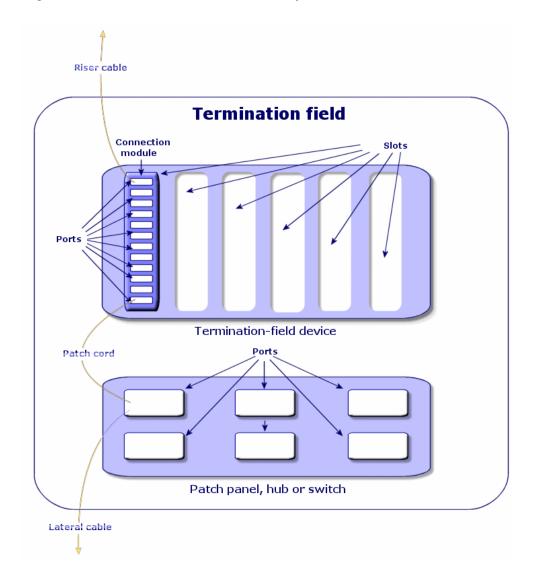
Tables in the AssetCenter database that describe these objects

Assets (amAsset)

Slot

The slot of a cable device in which you can introduce an extension card or module. These are, themselves, cable devices and create cable links with other cables or cable devices.

Figure 8.3. Cable device slots - representation



Examples

A *HP Procurve* 10/100 *Base T* - 8 *ports* module which inserts itself in a *ProCurve Switch* 4000 *M* - 10 *slots* switch.

Synonyms

Expansion connector

Tables in the AssetCenter database that describe these objects

- Slots (amSlot)
- Model slots (amModelSlot)

Color code entry

One of the colors of a color code.

Each color code entry can be associated with:

- Cable pairs/conductors
- Cable-device port pins

Tables in the AssetCenter database that describe these objects

Color code entries (amColorDet)

Topology step

One of the cable links to create in order to lay out a topology. The steps of a topology are ordered.

Tables in the AssetCenter database that describe these objects

Topology steps (amTopologyDet)

Label

An identifier, in the cable network, of the:

- Cable devices
- Bundles
- Cables
- Pins/ terminals
- Pairs/conductors
- Ports
- Links

They are created in the database, then physically attached to these components in order to locate and identify them.

Labels are created using label rules.

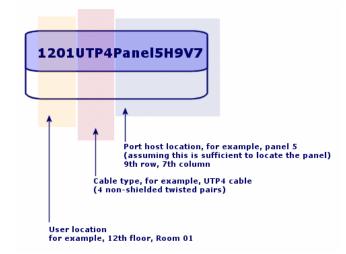
The label must best represent the item that it identifies. The label rule can create, for example, labels using the following information:

• Location of the host and the user.

- Host and user ports (identifier of the asset and the port).
- Type of cable or device (4 pairs, patch panel, etc.).

The corresponding label is presented in the following form:

Figure 8.4. Cable label - example



Bundle

Sub-set of pairs of a cable to which we assign a particular duty. The bundles are used for the creation of cable links between a cable and a cable device: We link a bundle of the cable to a port of the device. We make sure that the duty of the bundle is the same as the one of the port.

Tables in the AssetCenter database that describe these objects

Cable bundles (amCableBundle)

Duty

Type of data transported or processed by a:

- Cable bundle
- Cable device port
- Cable link

Duties are used by the cabling wizards that create links. They enable the wizards to reconcile a ports with bundles performing the same duty.

A duty is also assigned to a:

- Termination-field configuration slot: in order that this duty be propagated to the level of the ports of the device that is created there.
- A topology: in order that this duty be searched for or populated at the level of the bundles and ports to use in laying out a topology.
- A trace: in order to represent the duty fulfilled by the links, ports and bundles that compose the trace.

Examples

- Data
- Voice
- Video

Tables in the AssetCenter database that describe these objects

Cable duties (amCableDuty)

Topology group

A topology group brings together several topologies. The groups of topologies are used by the cabling wizards to automate the creation of cables, cable devices and cable links.

A topology group can, for example, regroup a topology for the creation of each of the following items:

- Fax link
- Telephone link
- LAN link

A topology group describes a standard configuration of the cable network. You can define different topology groups according to their location, for example.

Tables in the AssetCenter database that describe these objects

Topology groups (amTopologyGroup)

Host

This concept is used to define the direction of a trace. This determines which cable links will be hosts (parents) of other cable links when the wizards create the links between cables and/or cable devices.

In general the host direction is the one that goes to the main termination field.

Opposites

▶ User [page 188]

Cross connection

An action that consists of linking together network items (cables and cable devices).

Cable link

A cable link represents in AssetCenter the connection point at the level of a cable device (port) or cable (bundle). The succession of the links enables you to constitute a trace.

Tables in the AssetCenter database that describe these objects

Cable links (amCableLink)

Line

Horizontal axis of a termination field

Opposites

Column [page 176]

Ring

A jack outlet is composed of a *tip* and a *ring*, which are opposites. The jack connector uses a 2-pair cable. One of this cable's wires goes to the tip; the other to the ring. Thus, the *tip* and the *ring* help distinguish the two wires in a pair, no matter how many pairs there are in a cable.

Opposites

▶ Tip [page 183]

Pair/conductor

Data transmission media. Can be optic fiber or a pair of electric wires.

Tables in the AssetCenter database that describe these objects

Cable pairs/conductors (amCablePair)

A jack outlet is composed of a *tip* and a *ring*, which are opposites. The jack connector uses a 2-pair cable. One of this cable's wires goes to the tip; the other to the ring. Thus, the *tip* and the *ring* help distinguish the two wires in a pair, no matter how many pairs there are in a cable.

Opposites

▶ Ring [page 182]

Port

Slot used to transfer data into and out of a cable device.

In the Cable and Circuit module, the ports serve as the connection point with another port or a cable bundle when the cable links are created.

Tables in the AssetCenter database that describe these objects

- Ports (amPort)
- Model ports (amModelPort)

Opposites

Port is one of the two connection modes, opposite of the Pin connection mode.

Label rule

Formula for the composition of labels destined for the following items:

- Cable devices
- Bundles
- Cables
- Pins/ terminals
- Pairs/conductors
- Ports
- Links

These labels, except for those for the cable links, enable you to physically locate and identify components in a precise manner.

The label for the cable link helps you rapidly view what the link represents.

The calculation formulas are composed using Basic script.

Contrary to the default values of the fields, the label rules are never applied automatically. You must use a wizard for this.

Tip

Synonyms

None

Tables in the AssetCenter database that describe these objects Label rules (amLabelRule)

Termination field

Designates a cable distribution entity that enables you to link the cables coming from users to the cables going to hosts.

A termination field can be composed of:

- Patch panels
- Hubs
- Punchdown blocks
- Switches
- Etc.

Synonyms

Patch panel

Tables in the AssetCenter database that describe these objects

Termination fields (amTermField)

Role

The role corresponds to the part of the network that a cable serves.

The roles are associated to the following items:

- Cables
- Termination-field device models
- Termination-field devices
- Cables in a topology step

The role enables certain cabling wizards to create adequate connections between cable devices and cables.

To do this, the wizards match the roles of the:

- Topology steps
- Cables
- Termination-field configurations
- Termination field devices

Example of how this works

If, using a wizard that runs cables, you create cables whose roles are **Riser**, AssetCenter will automatically connect these cables to a device included in a termination field column whose role is also **Riser**.

Examples of roles

- Lateral (termination field to user equipment).
- Riser (termination field to another termination field).

Tables in the AssetCenter database that describe these objectsItemized lists (amItemizedList)

Sequence

Ordered number to identify items from numerous tables of the AssetCenter application.

Terminal

See Pin / Terminal.

Topology

A topology groups together the necessary data to automate the creation of a link:

- Links to create.
- Cables and cable devices to look for or create.

Examples

A topology describing the link that links a user to the telephone network (wall outlet -> cable -> patch panel).

Tables in the AssetCenter database that describe these objects

Topologies (amTopology)

Cable type

A cable type qualifies the models and the topology steps. This enables the cabling wizards to find or create the right type of cable from the topology step.

Examples

Twisted pairs

Tables in the AssetCenter database that describe these objects

Itemized lists (amItemizedList)

Connection type

A connection type represents a mode of connection between components of the cable network.

Example: RJ-45, RJ-11, Block of 4 pairs, etc.

It is a physical description of the pins of a port or the terminal fields of a connector.

Examples:

- The ports of the workstations, PABX or servers.
- Wall-mounted telephone sockets (RJ-45, RJ-9 sockets)
- The terminals of the termination-field punchdown blocks (CAD, RAC IBM).

The connection type enables the cabling wizards to:

- Find the ports of a cable device that correspond to the connection type defined in a topology step.
- Or to create virtual ports of the given type if necessary.

Tables in the AssetCenter database that describe these objects

Cable connection types (amCabCnxType)

Figure 8.5. RJ-45 connector - photo



Cable device type

The device type qualifies the models and the topology steps. This enables the cabling wizards to find or create the right type of cable device from a topology step.

Examples

- Switch module
- Patch panel
- Wall outlet
- Switch

Example of use

Let's suppose that you created a connection between a cable and a cable device whose connection type is *XXX* (Connection mode = *Pins*, number of pins/connectors = 8). Once the 8 pins of the terminal of the cable device are associated to a wire, AssetCenter automatically creates a virtual port.

Tables in the AssetCenter database that describe these objects

Itemized lists (amItemizedList)

Pair/Conductor type

A pair or conductor type is defined by its name and the number of physical conductors that compose it.

The pair/conductor type enables the cabling wizards to find the pairs/conductors of a cable that correspond to the type defined in a topology step. The pairs/conductors thus selected are grouped together in the form of a virtual bundle, and these virtual bundles are associated to ports (in a cable link).

Examples

Copper, 2 conductors

Tables in the AssetCenter database that describe these objects

Pair/conductor types (amCablePairType)

Slot type

The slot type defines which extension models or module it is possible to insert in a given slot of a cable device. This link is used when you select an asset for the slot of a cable device: Only the assets whose model is compatible with the slot type are proposed.

Tables in the AssetCenter database that describe these objects Slot types (amSlotType)

User

This concept is used to define the direction of a trace. This determines which cable links will be users (sub-links) of other cable links when the wizards create the links between cables and/or cable devices.

In general the user direction is the one that goes to the user's wall outlet.

Opposites

▶ Host [page 181]

Key terms of the profession (Cable and Circuit)

Adapter

Set of male and female connectors that enable a cable device to use a peripheral for which it doesn't have the necessary circuits and connections: models, CD-ROM drives. The adapters go into the expansion slots.

Figure 8.6. Adapter - photo



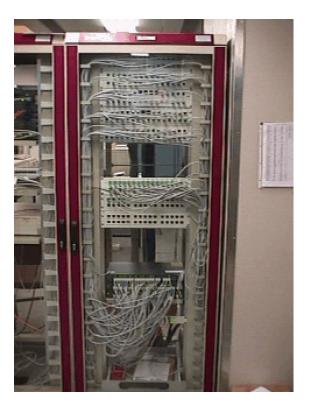




Rack

Storage unit that contains the cable distribution devices.

Figure 8.7. Rack - photo



Punchdown block

A box enabling you to connect the wires of a cable to a port in order to facilitate the connection with the cable.

Figure 8.8. Punchdown block - photos



Chassis

Metal frame upon which cable devices are mounted.

Cabling path

Physical path of the cable, which is opposite of the trace, which provides the logical path.

Opposites

▶ Trace [page 174] (logic)

Converter

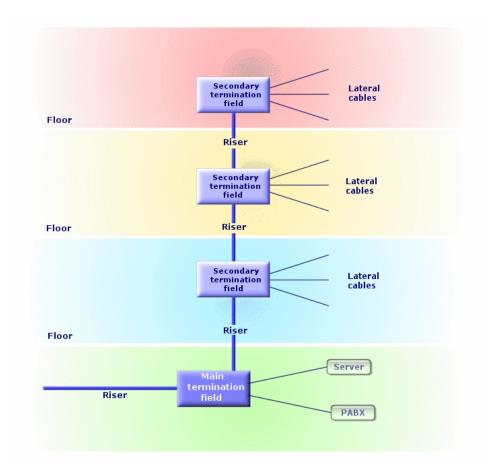
Device that:

- Changes the electronic signals or the IT data from one form into another. Example: An *ADC* converter that translates analog signals to digital signals.
- Connects equipment with incompatible interfaces.
- Converts the signal coming from one cable type in order to transmit it to another cable type.

Vertical distribution

Distribution of the cables between different termination fields. The cables linking the termination fields are generally composed of numerous pairs, and are called risers.

Figure 8.9. Vertical distribution of a cable network - representation



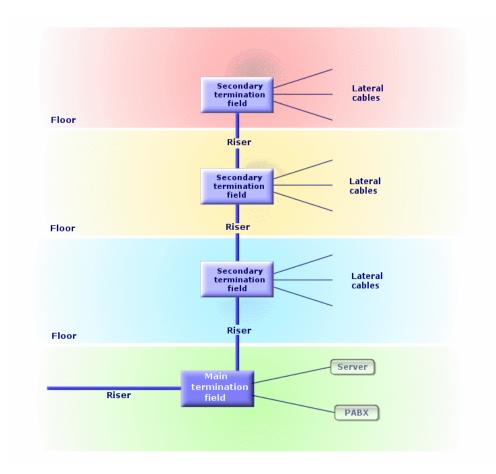
Opposites

▶ Lateral distribution [page 193]

Lateral distribution

Distribution of the cables between the users and the termination fields.

Figure 8.10. Lateral distribution of a cable network - representation



Synonyms

Horizontal distribution

Opposites

▶ Vertical distribution [page 192]

The hub is a box where cables come in from computers, servers, printers and other peripheral devices. It establishes communication between different network users.

There are passive hubs that are nothing more than simple *multiple outlet adapter*, which do not modify the signals going through them.

Then there are active hubs that regenerate the signals, thus eliminating the possible errors that can occur due to the distance or the electrical interference.

It is possible to connect several hubs together, thus expanding the existing network.

Hubs do not intervene in the transmission of messages. When a computer sends information, the hub transmits it to all the other computers, and only the computer for whom the message was intended will process it. If the message's receiver sends a response, the hub transmits this message to everyone as well: Again, only the computer for whom the message was intended will receive it. The authorized debit on the network is divided between the number of computers or peripheral devices that "communicate" at the same time.

Figure 8.11. Hub - photo



Synonyms

- Concentrator
- Multiplexer

Jumper/ Patch cord

Short cord used to establish a permanent, yet modifiable, connection between devices and termination fields.

Hub

Figure 8.12. Patch cord - photo



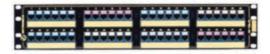
Length

Dimension of a cable.

Patch panel

Device of a termination field situated in the proximity of hubs, switches, etc. It comes in between them and the cables distributed throughout the location. The cables connect to the back of the patch panels. To each cable corresponds a connector on the panel. The other sides of the cables are linked to a wall outlet in an office. We use jumpers to link the panel's connectors (front side) to the ports of the termination field's active item.

Figure 8.13. Patch panel - photo



Synonyms

Interconnect

Wall outlet

Device that enables a male connector of a cable (of a computer, peripheral device, or telephone) to connect to the network.

Main termination field

Processed in AssetCenter as a termination field.

Repeater

Device used to reduce distortion by amplifying or regenerating a signal so that it can be transmitted farther with its original form and intensity. On the network, it connects two networks - or two segments of the network - at the level of the physical layer of the OSI model and regenerates the signal.

Figure 8.14. Repeater - photo



Synonyms

Regenerator

Riser

Vertical distribution cable (between floors or buildings).

Router

Even more *intelligent* than switches, the router is generally used to connect different networks together, for example, a company's internal network to the Internet network. These are veritable computers capable of filtering information according to criteria established by the user. They know how to direct information to a destination via the available paths and by choosing the most appropriate itinerary. They also know how to make two different types of networks, using different types of communication protocols, coexist.

Figure 8.15. Router - photo



Wallfield

Dealt with in AssetCenter as a termination field.

Switch

Like a hub, it also concentrates the cables coming from all the computers and peripheral devices of the network. Unlike a hub, the switch has a memory where it stores the addresses of the machines that it connects. When a computer sends a messages to another computer, the switch knows who is "communicating" and for whom the information is intended. It sends the data to the destination without having to involve the rest of the network. The target machine receives this data at the same rate as the transmitter.

Figure 8.16. Switch - photo





Synonyms

PABX

Run (a cable)

Action that consists of laying a cable.

Synonyms

Lay

Run

Section of cable.

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